REVISED AGENDA

CAPITOLA PLANNING COMMISSION

Thursday, August 4, 2016 – 7:00 PM

Chairperson	T.J. Welch
Commissioners	Ed Newman
	Gayle Ortiz
	Linda Smith
	Susan Westman

1. ROLL CALL AND PLEDGE OF ALLEGIANCE

2. ORAL COMMUNICATIONS

A. Additions and Deletions to Agenda

B. Public Comments

Short communications from the public concerning matters not on the Agenda.
All speakers are requested to print their name on the sign-in sheet located at the podium so that their name may be accurately recorded in the Minutes.

C. Commission Comments

D. Staff Comments

3. CONSENT CALENDAR

All matters listed under "Consent Calendar" are considered by the Planning Commission to be routine and will be enacted by one motion in the form listed below. There will be no separate discussion on these items prior to the time the Planning Commission votes on the action unless members of the public or the Planning Commission request specific items to be discussed for separate review. Items pulled for separate discussion will be considered in the order listed on the Agenda.

A. 211 Esplanade #16-122 035-211-03

Design Permit application to re-face the top of building fascia and a Sign Permit application for a wall sign at 211 Esplanade (The Sand Bar), located in the CV (Central Village) Zoning District.
This project is in the Coastal Zone but is exempt from a Coastal Development Permit.
Environmental Determination: Categorical Exemption
Property Owner: Chuck Hammers
Representative: Shawn Adams – Monterey Signs, filed: 6/14/16

4. PUBLIC HEARINGS

Public Hearings are intended to provide an opportunity for public discussion of each item listed as a Public Hearing. The following procedure is as follows: 1) Staff Presentation; 2) Public Discussion; 3) Planning Commission Comments; 4) Close public portion of the Hearing; 5) Planning Commission Discussion; and 6) Decision.

A. 190 El Camino Medio #16-107 035-262-01

Conditional Use Permit application to conduct an owner-occupied Bed and Breakfast at the existing residence and variance request to parking standards, located in the AR/R-1 (Automatic Review / Single-Family Residential) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit, which is appealable to the California Coastal Commission after all possible appeals are exhausted through the city.
Environmental Determination: Statutory Exemption
Property Owner: Gordon Hunt
Representative: Kathleen Notch, filed: 5/24/16

B. Verizon Wireless Communication Facility at 4400 Capitola Road #15-156 034-111-53

Design Permit and Conditional Use Permit for the installation of a new Verizon wireless antenna and ancillary equipment on the roof of an existing commercial building in the PO (Professional Office) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit, which is not appealable to the California Coastal Commission.
Environmental Determination: Categorical Exemption
Property Owner: Lomak Property Group
Representative: Verizon Wireless – Nexius, filed 9/29/15

C. 419 Capitola Avenue #16-101 APN: 035-131-26

Design Permit and Variance for front and side yard setbacks for a three story duplex located in the CN (Neighborhood Commercial) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit that is appealable to the California Coastal Commission after all possible appeals are exhausted through the city.
Environmental Determination: Categorical Exemption
Property Owners: Daniel Gomez and Daniel Townsend, filed 5/16/2016
Representative: Daniel Gomez and Daniel Townsend

D. 2205 Wharf Road #16-041 APN: 034-141-34

Minor land division to create two lots of record, design permit for a new Single-Family Residence, and a tree removal permit for the property located at 2205 Wharf Road in the RM-LM (Residential Multi-Family – Low-Medium Density) Zoning District.
This project is not in the Coastal Zone and does not require a Coastal Development Permit.
Environmental Determination: Categorical Exemption
Property Owner: Christopher Wright
Representative: Dennis Norton, filed: 3/14/16

5. DIRECTOR'S REPORT

6. COMMISSION COMMUNICATIONS

7. ADJOURNMENT

APPEALS: The following decisions of the Planning Commission can be appealed to the City Council within the (10) calendar days following the date of the Commission action: Conditional Use Permit, Variance, and Coastal Permit. The decision of the Planning Commission pertaining to an Architectural and Site Review can be appealed to the City Council within the (10) working days following the date of the Commission action. If the tenth day falls on a weekend or holiday, the appeal period is extended to the next business day.

All appeals must be in writing, setting forth the nature of the action and the basis upon which the action is considered to be in error, and addressed to the City Council in care of the City Clerk. An appeal must be accompanied by a one hundred forty two dollar ($142.00) filing fee, unless the item involves a Coastal Permit that is appealable to the Coastal Commission, in which case there is no fee. If you challenge a decision of the Planning Commission in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this agenda, or in written correspondence delivered to the City at, or prior to, the public hearing.

Notice regarding Planning Commission meetings: The Planning Commission meets regularly on the 1st Thursday of each month at 7:00 p.m. in the City Hall Council Chambers located at 420 Capitola Avenue, Capitola.

Agenda and Agenda Packet Materials: The Planning Commission Agenda and complete Agenda Packet are available on the Internet at the City's website: www.cityofcapitola.org. Agendas are also available at the Capitola Branch Library, 2005 Wharf Road, Capitola, on the Monday prior to the Thursday meeting. Need more information? Contact the Community Development Department at (831) 475-7300.

Agenda Materials Distributed after Distribution of the Agenda Packet: Materials that are a public record under Government Code § 54957.5(A) and that relate to an agenda item of a regular meeting of the Planning Commission that are distributed to a majority of all the members of the Planning Commission more than 72 hours prior to that meeting shall be available for public inspection at City Hall located at 420 Capitola Avenue, Capitola, during normal business hours.

Americans with Disabilities Act: Disability-related aids or services are available to enable persons with a disability to participate in this meeting consistent with the Federal Americans with Disabilities Act of 1990. Assisted listening devices are available for individuals with hearing impairments at the meeting in the City Council Chambers. Should you require special accommodations to participate in the meeting due to a disability, please contact the Community Development Department at least 24 hours in advance of the meeting at (831) 475-7300. In an effort to accommodate individuals with environmental sensitivities, attendees are requested to refrain from wearing perfumes and other scented products.

Televised Meetings: Planning Commission meetings are cablecast "Live" on Charter Communications Cable TV Channel 8 and are recorded to be replayed on the following Monday and Friday at 1:00 p.m. on Charter Channel 71 and Comcast Channel 25. Meetings can also be viewed from the City's website: www.cityofcapitola.org.

STAFF REPORT

TO: PLANNING COMMISSION

FROM: COMMUNITY DEVELOPMENT

DATE: AUGUST 4, 2016

SUBJECT: **211 Esplanade #16-122 035-211-03**

Design Permit application to re-face the top of building fascia and a Sign Permit application for a wall sign at 211 Esplanade (The Sand Bar), located in the CV (Central Village) Zoning District.
This project is in the Coastal Zone but is exempt from a Coastal Development Permit.
Environmental Determination: Categorical Exemption
Property Owner: Chuck Hammers
Representative: Shawn Adams – Monterey Signs, filed: 6/14/16

APPLICANT PROPOSAL

The applicant is proposing to install a new wall sign for The Sand Bar located at 211 Esplanade, located in the CV (Central Village) zoning district. The new 34 square foot wall sign would include acrylic lettering and an acrylic logo attached to the existing stucco fascia. Behind the new sign, the applicant is proposing to attach custom stained wood backing to the existing stucco fascia.

BACKGROUND

The application was reviewed by the Architectural and Site Review Committee on July 27th, 2016. There were no comments generated during the meeting as none of the members had concerns or issues with the proposal.

DISCUSSION

The Sand Bar restaurant and bar is located at 211 Esplanade, centered within the row of restaurants and bars closest to the beach. The entrance to the restaurant is off of Esplande. The applicant is proposing to reface the top fascia and install a new wall sign above the entrance.

The proposed new wall sign, including both the lettering and logo, would be roughly 34 square feet total. The main lettering, “The Sand Bar”, would be 17 inches tall, 113 inches long, and use one-half inch thick blue acrylic. Below the main lettering is a description of the restaurant, “California Bar & Grill”, which would be roughly four inches tall and would use one-half inch orange acrylic. To the right of the lettering, the applicant is proposing a guitar and beach themed logo. The logo would be made of one-half inch acrylic and would be 24 inches tall at its highest point and 82 inches long.

The applicant is proposing to reface the existing fascia with stained wood backing. The wood backing would expand the full 38 feet of the building front and would serve as a backdrop to the new sign proposal. In between the acrylic signs and stained wood backing is a one and a half inch spacer to give a floating appearance to the sign. In addition, the applicant is proposing to install five "gooseneck" lights above the signage. The lighting would be directed against the new sign and would not shine onto the sidewalk or street. (Attachment 1)

ANALYSIS

The Capitola Municipal Code has specific regulations related to wall signs within the Central Village. Pursuant to chapter 17.57.070-B, "the size of each individual sign shall not be greater than one square foot of sign area for for each one linear foot of business frontage." The building at 211 Esplanade contains just over 38 feet of linear frontage. The maximum sign that is allowed at this location would be 38 square feet. The proposed lettering and logo would be roughly 34 square feet combined and thus would comply with the code.

The code also requires that no portion of the sign may project more than twelve inches from the building face (17.57.070-B-3). The proposed sign projects two inches off the face of the building. In addition, the zoning code (§17.57.060) contains specefic regulations for signs within the Central Village, which are also listed within the Central Vilalge Design Guidelines, as follows:

> 1. Relate all signs to their surroundings in terms of size, shape, color, texture, and lighting so that they are complimentary to the overall design of the building and are not in visual competition with other conforming signs in the area. Signs should be an integral part of the building and site design.
>
> Staff analysis: The proposed new wall signs and wood backing would relate well to the overall building and surrounding structures. The proposed new sign would not be in visual competetions with nearby signs as it will be similarly sized. In addition, the "gooseneck" lighting would project 29 inches and be similar in design to adjacent businesses' sign lighting. The proposed wood backing would be a complimentary upgrade to the existing fascia.
>
> 2. Arrange any external spot or flood sign lighting so that the light source is screened from direct view, and so that the light is directed against the sign and does not shine into adjacent property or distract motorists or pedestrians.
>
> Staff analysis: The proposed "gooseneck" lighting would be directed against the new wall sign. The existing building contains a three foot overhang located below the new signage which will help contain any excess light. Condition of Approval #3 has been included to ensure that this requirement is met.
>
> 3. Sign programs will be developed for buildings which house more than one business. Signs need not match but should be compatible for the building and each other.
>
> Staff analysis: The existing building at 211 Esplanade does not house more than one business, therefore this section does not apply.
>
> 4. One menu box with a maximum of 2 square feet shall be allowed for each restaurant. The board design and materials shall be consistent with the materials and design of the building face.

Staff analysis: A menu box is not a part of this application.

5. If banners and flags are placed on a building they must be included and reviewed as part of the sign program.

Staff analysis: No banners or flags are proposed on the building.

The proposed wall sign and stained wood backing conform to the requirements of the Capitola Muncipal Code. The exterior modifications would be complimentary to the overall design of the existing building and adjacent business along Esplanade.

CEQA

Section 15301 of the CEQA Guidelines exempts minor exterior modifications to existing structures. This project involves one new wall sign and new exterior materials on to an existing restaurant in the CV (Central Village) Zoning District. No adverse environmental impacts were discovered during review of the proposed project.

RECOMMENDATION

Staff recommends that the Planning Commission **approve** the new wood fascia backing and new wall sign for application #16-122, subject to the following conditions and findings:

CONDITIONS

1. The project approval consists of a sign permit for a new wall sign and design permit for new wood fascia backing behind the sign, located on the front façade of 211 Esplanade in the CV (Central Village) zoning district. The proposed project is approved as indicated in the conditions of approval reviewed and approved by the Planning Commission on August 4th, 2016, except as modified through conditions imposed by the Planning Commission during the hearing.

2. One new wall sign and associated stained wood backing are approved for the property at 211 Esplanade. The approved sign includes lettering and a guitar and beach themed logo, constructed out of one-half inch acrylic. The lettering portion is 26 inches tall and 113 inches long. The logo is 24 inches tall and 82 inches long. The total square footage of the new signage is 34 square feet. The stained wood backing will replace all 38 feet – two inches of the building fascia above the existing overhang, and is located behind the new wall sign.

3. The approval includes five “gooseneck” lights above the signage. The “gooseneck” light source must be screened from direct view, so that the light is directed against the sign and does not shine into adjacent property or distract motorists or pedestrians along Esplanade and adjacent properties.

4. Prior to installation, a building permit shall be secured for the new wall sign and wooden fascia authorized by this permit. Final building plans shall be consistent with the plans approved by the Planning Commission.

5. At time of submittal for building permit review, the Conditions of Approval must be printed in full on the cover sheet of the construction plans.

6. Prior to making any changes to approved plans, modifications must be specifically requested and submitted in writing to the Community Development Department. Any significant changes shall require Planning Commission approval.

7. During construction, any construction activity shall be subject to a construction noise curfew, except when otherwise specified in the building permit issued by the City. Construction noise shall be prohibited between the hours of nine p.m. and seven-thirty a.m. on weekdays. Construction noise shall be prohibited on weekends with the exception of Saturday work between nine a.m. and four p.m. or emergency work approved by the building official. §9.12.010B

8. Prior to issuance of building permit, all Planning fees associated with permit #16-122 shall be paid in full.

FINDINGS

A. The signage, as designed and conditioned, will maintain the character and aesthetic integrity of the subject property and the surrounding area.
The wall sign and stained wood backing on the front of the building were designed to maintain the character and aesthetic of the Central Village district.

B. The signage, as designed and conditioned, reasonably prevent and reduce the sort of visual blight which results when signs are designed without due regard to effect on their surroundings.
The new wall sign and wood backing on the front of the building complement the building design and the design of neighboring building along the Esplanade.

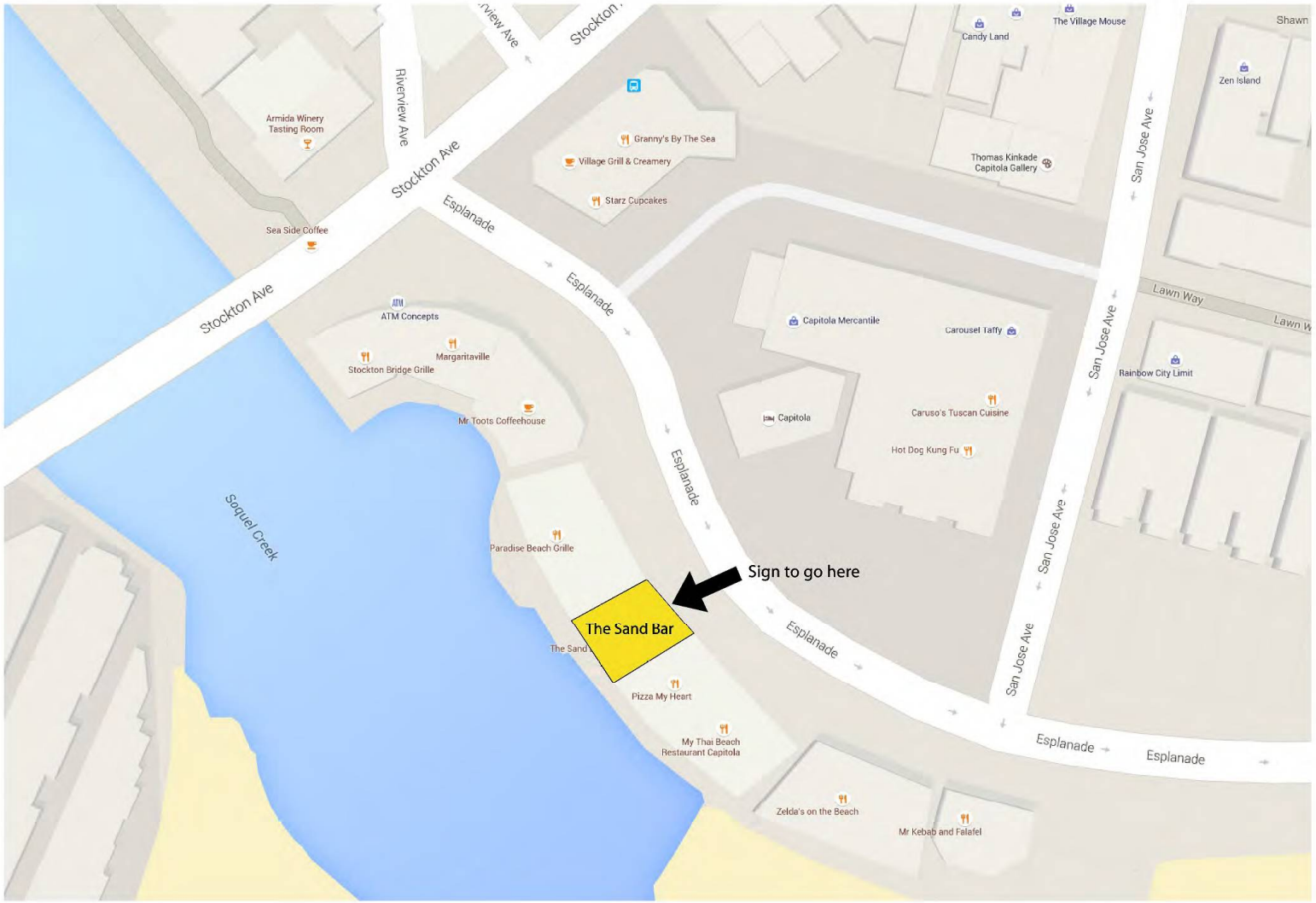
C. This project is categorically exempt under Section 15301 of the California Environmental Quality Act and is subject to Section 753.5 of Title 14 of the California Code of Regulations.
The project involves exterior modifications to an existing restaurant in the CV (Central Village) zoning district. Section 15301 of the CEQA Guidelines exempts minor modifications to existing structures.

ATTACHMENTS:

1. Plan Set

Prepared By: Ryan Safty
Assistant Planner

Site map 211 Esplanade, Capitola CA



PH: 831.206.8086
101 Cooper Street
Suite 235
Santa Cruz, CA 95060

CUSTOMER	The Sand Bar Capitola	CONTACT	Jeff Lantis	PHONE	831-632-0490
ADDRESS	211 Esplanade, Capitola, CA 95010	EMAIL	thesandbarcapitola@yahoo.com		

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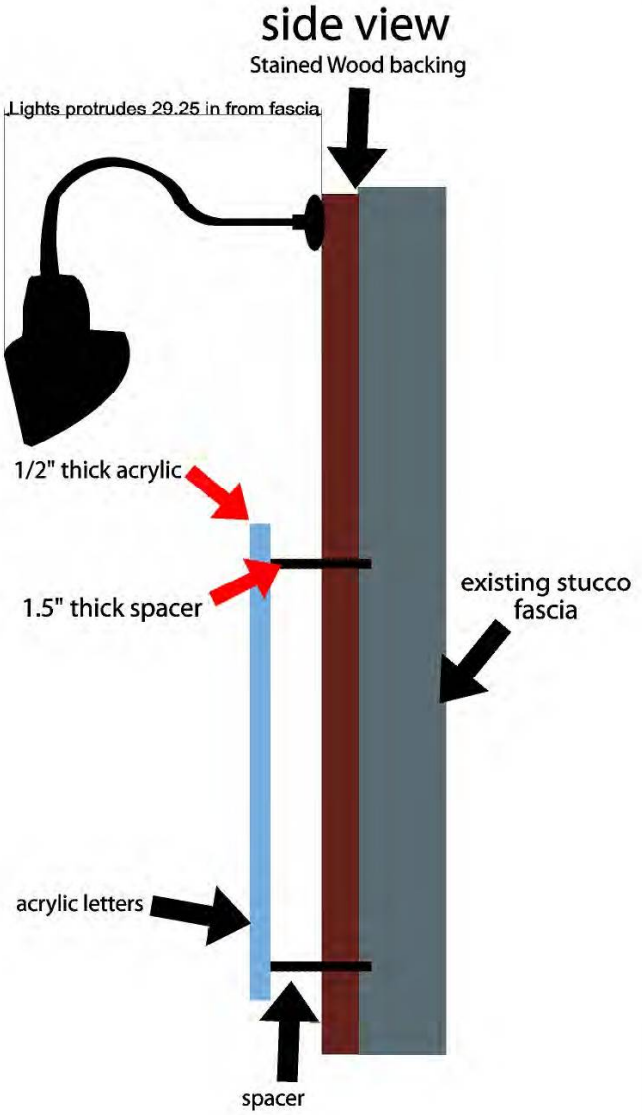
1/2" thick laser cut acrylic lettering
with 1.5" spacers to float letters off wall
Acrylic lettering stud mounted to custom stained wood
Overall width of sign is 201.9" wide x 26.2" tall (36.73 sq. ft.)



Light blue acrylic 2648

Orange acrylic 2119

Light Green acrylic 2108

Desert Sand acrylic 4660

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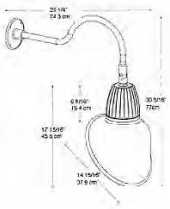
Created: 06/03/2013

GNLED13B

13 Watt Angled Cone Shade LED Gooseneck Luminaire designed to match the architecture of Main Street storefronts and building perimeters.

Color: Black

Weight: 11.2 lbs



LED Info

Watts:	13W
Color Temp:	4000K (Neutral)
Color Accuracy:	86
L70 Lifespan:	100000
LM79 Lumens:	571
Efficacy:	38 LPW

Driver Info

Type:	Constant Current
120V:	0.3 A
208V:	0.3 A
240V:	0.3 A
277V:	0.15 A
Input Watts:	15W
Efficiency:	86%

Technical Specifications

UL Listing:
Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

Lumen Maintenance:
The LED will deliver 70% of its initial lumens at 100,000 hours of operation.

Fixture:
The GNLED13B comes with the GOOSE1B Arm.

Mounting:
Heavy-duty mounting arm with "O" ring seal and stainless steel screw.

Driver:
Single multi-chip, 13W high-output, long-life LED Driver Constant Current.

Thermal Management:
Custom heat sink assembly in thermal contact with die-cast aluminum housing for superior heat sinking.

Housing:
Precision die-cast aluminum housing, lens frame and mounting plate.

Gaskets:
High Temperature Silicone

Cold Weather Starting:
The minimum starting temperature is -40□F/-40□C

Shades:
Angled Cone Shade offered.

Lens:
Glare-reducing frosted glass lens.

Finish:
Chip and fade resistant polyester powder coat finish.

Surge Protection:
4kv

Color Temperature (Nominal CCT):
4000K

Fixture Efficacy:
37.8 Lumens per Watt

Color Accuracy:
86 CRI

Color Stability:
RAB LED products significantly exceed Energy Star Requirements for Chromatic Stability during LM-80 Testing.

Color Uniformity:
RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2008.

Green Technology:
RAB LEDs are Mercury and UV free.

IESNA LM-79 & IESNA LM-80 Testing:
RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

Patents:
The design of the Gooseneck is protected by patents pending in US, Canada, China and Taiwan.

Created: 06/03/2013

GNLED13B - continued

Warranty:
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. See our full warranty

Country of Origin:
Designed by RAB in New Jersey and assembled in Taiwan

Trade Agreements Act Compliant:
This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

GSA Schedule:
Suitable in accordance with FAR Subpart 25.4

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STAFF REPORT

TO: PLANNING COMMISSION

FROM: COMMUNITY DEVELOPMENT

DATE: AUGUST 4, 2016

SUBJECT: **190 El Camino Medio #16-107 035-262-01**

Conditional Use Permit application to conduct an owner-occupied Bed and Breakfast at the existing residence and variance request to parking standards, located in the AR/R-1 (Automatic Review / Single-Family Residential) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit, which is appealable to the California Coastal Commission after all possible appeals are exhausted through the city.
Environmental Determination: Statutory Exemption
Property Owner: Gordon Hunt
Representative: Kathleen Notch, filed: 5/24/16

APPLICANT PROPOSAL

The application is for a Conditional Use Permit to operate a bed and breakfast use out of an existing three-story single-family residence. The owner would be on-site during any guest visits. The existing home does not meet current parking standards or the increased parking requirements for the proposed bed and breakfast use; therefore, the applicant is also requesting a variance from parking standards.

BACKGROUND

As part of a city-wide code enforcement sweep of unpermitted vacation rentals, staff notified the owner of 190 El Camino Medio on February 22nd, 2016 that the home was operating as a transient rental use without a permit. The zoning code only allows transient rentals within the Transient Rental Overlay zone, which consists of the Central Village and the southern portion of Riverview Avenue. The home at 190 El Camino Medio is located just outside of the Transient Rental Overlay zone, and thus is not allowed to be used as a transient rental use.

In response to the code enforcement letter, the property owner applied for a Conditional Use Permit on May 24th, 2016 to operate the existing single-family residence as a bed and breakfast. Staff was concerned with the location of the existing uncovered parking in relation to the property lines and required a survey to be conducted. Staff issued an incomplete letter on June 20th, 2016, explaining that a survey of the existing building footprint and property lines was required in order to continue processing the application. A survey was submitted and the application was deemed complete on July 5th, 2016.

DISCUSSION

The existing three-story residence is located in the Automatic Review Overlay zone and Single-Family Residential (AR/R-1) zoning districts. Neighboring properties to the west are zoned CV (Central Village) and are located within the allowed Transient Rental Overlay (TRO) zone (Attachment 1). The TRO zoned properties can obtain an administrative Transient Rental Use Permit and business license to operate their residence as a "vacation rental" as long as they show proof of one parking space, either on-site or through a Pacific Cove parking pass. The property at 190 El Camino, however, has no option for a Transient Rental Use Permit without an expansion of the TRO overlay district through amendments to the zoning code and Local Coastal Program. The applicant is therefore applying for a use permit to operate a bed and breakfast.

A bed and breakfast is allowed in the R-1 zone with a Conditional Use Permit approved by the Planning Commission. A bed and breakfast is defined as a home occupation in which the occupant is the only employee, where guests rent rooms for sleeping purposes for transient (less than 30 days) occupancy, where no more than four persons can stay at any time regardless of the number of rooms, and where one parking space is required for each room available in addition to the current parking standards being met on-site (§17.03.085).

Parking

The existing home is approximately 2,500 square feet. According to the municipal code, parking requirements for bed and breakfast use permits are, "one space for each bedroom rented, in addition to the spaces required for the single family residence, each regular space must be a minimum of nine feet by eighteen feet. Fifty percent of the spaces may be compact spaces of eight feet by sixteen feet" (§17.51.130.E)

In accordance with current parking standards, the existing residence is required to have three parking spaces, one of which must be covered. The survey of 190 El Camino Medio shows that the property contains two covered garage spaces, but the three uncovered spaces shown in front of the home are not located within property lines. Parking spaces for R-1 zoned properties must be located entirely on-site and may not be located in any public or private right-of-way (§17.15.130.F) There is approximately seven feet between the front of the home and the front property line. The existing uncovered parking area extends approximately 14 feet into the El Camino Medio public right-of-way (Attachment 1).

The applicant is proposing to provide four on-site parking spaces by placing two spots in tandem behind the existing garage spots. There is 32 feet from the back wall of the garage to the front property line. The applicant would like to place tandem parking behind both of the garage spaces. In order to do this, the two uncovered spaces would be partially located within the garage and partially outside. The garage doors would not be functional when all four spaces are being used.

The Municipal Code allows tandem parking in front of a garage within the R-1 zone (§17.15.130.H). The uncovered spaces can be considered compact and must be eight feet wide by 16 feet long, while the covered spaces must be ten feet by 20 feet. A minimum of 36 feet are required for the length of the set of two tandem spaces and the subject property only contains 32 feet at the furthest point. Therefore, the applicant is requesting a variance to the parking size requirements.

Variance

The applicant is requesting a variance to reduce parking size requirements for a bed and breakfast use in the R-1 zone. The applicant is proposing four, eight feet wide by 15 feet long parking spaces when the code requires covered spaces to be ten feet by 20 feet and requires (compact) uncovered spaces to be eight feet by 16 feet. Pursuant to §17.66.090, the Planning Commission may grant a variance permit when it finds:

1. There are special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of this title is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classification.

2. That the grant of a variance permit would not constitute a grant of special privilege inconsistent with the limitation upon other properties in the vicinity and zone in which subject property is situated.

The subject property is located on a steep sloping lot directly adjacent to the CV and TRO zoning districts. The existing home is built into the cliff; therefore, moving the home back to create additional room for parking would be very difficult. Although there are unique circumstances related to the topography of the property, a variance in this case is intended to allow the property owner to intensify their existing single-family use and is not necessary to provide a reasonable property right enjoyed by others in the same zone and vicinity.

In addition, the physical characteristics and condition of El Camino Medio are not favorable to allowing an encroachment permit for off-site parking. El Camino Medio is a narrow street and the portion in front of the subject property allows two-way traffic. A variance would further narrow the roadway and constrict safe passage of vehicles and pedestrians. In addition, the area in front of the subject property is adjacent to pedestrian stairs leading from the village to Depot Hill, and the City may want to add sidewalks connecting the stairway to Monterey Avenue in the future.

Finally, allowing a parking variance to accommodate a bed and breakfast use in residential areas of the village could encourage other property owners to seek parking waivers and exceptions to operate bed and breakfasts or other transient rental uses, further exacerbating village parking issues.

For the reasons stated above, staff recommends denial of the variance request. If the Planning Commission wishes to allow more bed and breakfast establishments or transient rentals in the village, staff would recommend the Commission consider amending current restrictions on such uses in conjunction with the zoning code update.

CEQA

The project is statutorily exempt pursuant to CEQA Section 15270 (Projects which are Disapproved).

RECOMMENDATION

Staff recommends that the Planning Commission **deny** the variance request to reduce parking size dimensions and thus deny application #16-107 based on the following Conditions and Findings for Approval.

FINDINGS

A. **The application, subject to the conditions imposed, does not secure the purposes of the Zoning Ordinance, General Plan, and Local Coastal Plan.**
Community Development Department Staff and the Planning Commission have reviewed the project. The application does not secure the purposes of the Zoning Ordinance and General Plan because the project would not provide required on-site parking in an already parking deficient area.

B. **The application will not maintain the character and integrity of the neighborhood.**
Community Development Staff and the Planning Commission have reviewed the project. The project will not maintain the character and integrity of the neighborhood because the project would not meet on-site parking requirements in an already parking deficient area.

C. **This project is statutorily exempt under Section 15270 of the California Environmental Quality Act and is not subject to Section 753.5 of Title 14 of the California Code of Regulations.**
Section 15270 of the CEQA Guidelines statutorily exempts projects which are disapproved.

D. **Special circumstances applicable to the subject property, including size, shape, topography, location or surroundings, exist on the site but the strict application of this title is not found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classification;**
The strict application of the code does not deprive the property of privileges enjoyed by other properties under identical zoning. The property currently supports a single-family residence similar to others in the vicinity. All of the properties on El Camino Medio are zoned AR/R-1 (Automatic Review / Single-Family Residential) and none enjoy the privilege of operating a bed and breakfast use with deficient on-site parking.

E. **The grant of a variance would constitute a grant of a special privilege inconsistent with the limitation upon other properties in the vicinity and zone in which subject property is situated.**
A variance to parking standards would constitute the grant of a special privilege because no other properties in the same zone and vicinity currently enjoy use of a bed and breakfast with deficient on-site parking.

COASTAL FINDINGS

D. Findings Required. A coastal permit shall be granted only upon adoption of specific written factual findings supporting the conclusion that the proposed development conforms to the certified Local Coastal Program, including, but not limited to:

- The proposed development does not conform to the City's certified Local Coastal Plan (LCP). The specific, factual findings, as per CMC Section 17.46.090 (D) are as follows:

(D) (2) Require Project-Specific Findings. In determining any requirement for public access, including the type of access and character of use, the city shall evaluate and document in written findings the factors identified in subsections (D) (2) (a) through (e), to the extent applicable. The findings shall explain the basis for

the conclusions and decisions of the city and shall be supported by substantial evidence in the record. If an access dedication is required as a condition of approval, the findings shall explain how the adverse effects which have been identified will be alleviated or mitigated by the dedication. As used in this section, "cumulative effect" means the effect of the individual project in combination with the effects of past projects, other current projects, and probable future projects, including development allowed under applicable planning and zoning.

(D) (2) (a) Project Effects on Demand for Access and Recreation. Identification of existing and open public access and coastal recreation areas and facilities in the regional and local vicinity of the development. Analysis of the project's effects upon existing public access and recreation opportunities. Analysis of the project's cumulative effects upon the use and capacity of the identified access and recreation opportunities, including public tidelands and beach resources, and upon the capacity of major coastal roads from subdivision, intensification or cumulative build-out. Projection for the anticipated demand and need for increased coastal access and recreation opportunities for the public. Analysis of the contribution of the project's cumulative effects to any such projected increase. Description of the physical characteristics of the site and its proximity to the sea, tideland viewing points, upland recreation areas, and trail linkages to tidelands or recreation areas. Analysis of the importance and potential of the site, because of its location or other characteristics, for creating, preserving or enhancing public access to tidelands or public recreation opportunities;

- The proposed project is located at 190 El Camino Medio. The home is located in an area with coastal access. The applicant's propose to use public right-of-way to meet on-site parking demands which could preclude a future sidewalk to connect to the pedestrian stairs leading to Depot Hill.

(D) (2) (b) Shoreline Processes. Description of the existing shoreline conditions, including beach profile, accessibility and usability of the beach, history of erosion or accretion, character and sources of sand, wave and sand movement, presence of shoreline protective structures, location of the line of mean high tide during the season when the beach is at its narrowest (generally during the late winter) and the proximity of that line to existing structures, and any other factors which substantially characterize or affect the shoreline processes at the site. Identification of anticipated changes to shoreline processes at the site. Identification of anticipated changes to shoreline processes and beach profile unrelated to the proposed development. Description and analysis of any reasonably likely changes, attributable to the primary and cumulative effects of the project, to: wave and sand movement affecting beaches in the vicinity of the project; the profile of the beach; the character, extent, accessibility and usability of the beach; and any other factors which characterize or affect beaches in the vicinity. Analysis of the effect of any identified changes of the project, alone or in combination with other anticipated changes, will have upon the ability of the public to use public tidelands and shoreline recreation areas;

- The proposed project is located along El Camino Medio. No portion of the project is located along the shoreline or beach, but the project is near the beach.

(D) (2) (c) Historic Public Use. Evidence of use of the site by members of the general public for a continuous five-year period (such use may be seasonal). Evidence of the type and character of use made by the public (vertical, lateral, blufftop, etc., and for passive and/or active recreational use, etc.). Identification of any agency (or person) who has maintained and/or improved the area subject to

historic public use and the nature of the maintenance performed and improvements made. Identification of the record owner of the area historically used by the public and any attempts by the owner to prohibit public use of the area, including the success or failure of those attempts. Description of the potential for adverse impact on public use of the area from the proposed development (including but not limited to, creation of physical or psychological impediments to public use);

- There is not history of public use on the subject lot. However, there is history of public use on the adjacent stairwell to the north.

(D) (2) (d) Physical Obstructions. Description of any physical aspects of the development which block or impede the ability of the public to get to or along the tidelands, public recreation areas, or other public coastal resources or to see the shoreline;

- The proposed project is located at 190 El Camino Medio. The home is located in an area with coastal access. The applicant's propose to use public right-of-way to meet on-site parking demands which could preclude a future sidewalk to connect to the pedestrian stairs leading to Depot Hill.

(D) (2) (e) Other Adverse Impacts on Access and Recreation. Description of the development's physical proximity and relationship to the shoreline and any public recreation area. Analysis of the extent of which buildings, walls, signs, streets or other aspects of the development, individually or cumulatively, are likely to diminish the public's use of tidelands or lands committed to public recreation. Description of any alteration of the aesthetic, visual or recreational value of public use areas, and of any diminution of the quality or amount of recreational use of public lands which may be attributable to the individual or cumulative effects of the development.

- The proposed project is located on private property but could impact access and recreation of the public stairwell. The project does not diminish the public's use of tidelands or lands committed to public recreation nor alter the aesthetic, visual or recreational value of public use areas.

(D) (3) (a – c) Required Findings for Public Access Exceptions. Any determination that one of the exceptions of subsection (F) (2) applies to a development shall be supported by written findings of fact, analysis and conclusions which address all of the following:

a. The type of access potentially applicable to the site involved (vertical, lateral, bluff top, etc.) and its location in relation to the fragile coastal resource to be protected, the agricultural use, the public safety concern, or the military facility which is the basis for the exception, as applicable;

b. Unavailability of any mitigating measures to manage the type, character, intensity, hours, season or location of such use so that agricultural resources, fragile coastal resources, public safety, or military security, as applicable, are protected;

c. Ability of the public, through another reasonable means, to reach the same area of public tidelands as would be made accessible by an access way on the subject land.

- The project is not requesting a Public Access Exception, therefore these findings do not apply.

(D) (4) (a – f) Findings for Management Plan Conditions. Written findings in support of a condition requiring a management plan for regulating the time and manner or character of public access use must address the following factors, as applicable:

a. Identification and protection of specific habitat values including the reasons supporting the conclusions that such values must be protected by limiting the hours, seasons, or character of public use;

- The project is located on a residential lot.

b. Topographic constraints of the development site;

- The project is located on a steep sloping lot.

c. Recreational needs of the public;

- The project does not impact recreational needs of the public, but if approved it may affect the City's ability to provide pedestrian walkways from the stairwell to Monterey Avenue.

d. Rights of privacy of the landowner which could not be mitigated by setting the project back from the access way or otherwise conditioning the development;

e. The requirements of the possible accepting agency, if an offer of dedication is the mechanism for securing public access;

f. Feasibility of adequate setbacks, fencing, landscaping, and other methods as part of a management plan to regulate public use.

(D) (5) Project complies with public access requirements, including submittal of appropriate legal documents to ensure the right of public access whenever, and as, required by the certified land use plan and Section 17.46.010 (coastal access requirements);

- No legal documents to ensure public access rights are required for the proposed project due to it being denied.

(D) (6) Project complies with visitor-serving and recreational use policies;

SEC. 30222

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

- The project involves a use change to a single family home on a residential lot of record.

SEC. 30223

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

- The project involves the use of a single family home on a residential lot of record.

c) Visitor-serving facilities that cannot be feasibly located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

- The project involves the use of a single family home on a residential lot of record.

(D) (7) Project complies with applicable standards and requirements for provision of public and private parking, pedestrian access, alternate means of transportation and/or traffic improvements;

- The project does not comply with applicable parking standards.

(D) (8) Review of project design, site plan, signing, lighting, landscaping, etc., by the city's architectural and site review committee, and compliance with adopted design guidelines and standards, and review committee recommendations;

- The project is requesting a variance from the parking size standards, but meets the other requirements of the code due to their being no addition space proposed.

(D) (9) Project complies with LCP policies regarding protection of public landmarks, protection or provision of public views; and shall not block or detract from public views to and along Capitola's shoreline;

- The project will not negatively impact public landmarks and/or public views. The project will not block or detract from public views to and along Capitola's shoreline.

(D) (10) Demonstrated availability and adequacy of water and sewer services;

- The project is located on a legal lot of record with available water and sewer services.

(D) (11) Provisions of minimum water flow rates and fire response times;

- The project is located within close proximity of the Capitola fire department. Water is available at the location.

(D) (12) Project complies with water and energy conservation standards;

- The project is for a use modification to an existing single family home. There are no structural changes proposed.

(D) (13) Provision of park dedication, school impact, and other fees as may be required;

- The project was denied, thus this section does not apply.

(D) (14) Project complies with coastal housing policies, and applicable ordinances including condominium conversion and mobile home ordinances;

- The project does not involve a condo conversion or mobile homes.

(D) (15) Project complies with natural resource, habitat, and archaeological protection policies;

- Conditions of approval can be included to ensure compliance with established policies if approved.

(D) (16) Project complies with Monarch butterfly habitat protection policies;

- The project is not located in areas where Monarch Butterflies have been encountered, identified and documented.

(D) (17) Project provides drainage and erosion and control measures to protect marine, stream, and wetland water quality from urban runoff and erosion;

- The proposal does not include any physical change to the property or home.

(D) (18) Geologic/engineering reports have been prepared by qualified professional for projects in seismic areas, geologically unstable areas, or coastal bluffs, and project complies with hazard protection policies including provision of appropriate setbacks and mitigation measures;

- The proposal does not include any physical change to the property or home.

(D) (19) All other geological, flood and fire hazards are accounted for and mitigated in the project design;

- The proposal does not include any physical change to the property or home.

(D) (20) Project complies with shoreline structure policies;

- The proposal does not include any physical change to the property or home.

(D) (21) The uses proposed are consistent with the permitted or conditional uses of the zoning district in which the project is located;

- This use is a conditional use, but not consistent with the parking requirements of the Single Family zoning district.

(D) (22) Conformance to requirements of all other city ordinances, zoning requirements, and project review procedures;

- The project does not conform to zoning and parking requirements.

(D) (23) Project complies with the Capitola parking permit program as follows:

- The project site is located within the area of the Capitola parking permit program, but would not meet the parking requirements of the zoning code.

ATTACHMENTS:

1. Application Packet

Prepared By: Ryan Safty
Assistant Planner

Gordon Hunt
190 El Camino Medio
Capitola CA 95010
gordonincapitola@yahoo.com

City of Capitola Planning Department
Gayle Ortiz, Susan Westman, Ed Newman
Linda Smith, T.J. Welch

July 13, 2016

In June I applyed for business license for short term rental. After one month I was informed I was one parcel outside of the TRO zone. I applyed for a Use Permit for a B&B only to find in the survey my property line divided my parking apron in front of my garages legally not allowing enough parking. The area between my garages and the street according to the survey is considered public access and has been used for 40 years as part of my property for parking.

What I am requesting is a variance allowing parking to comply with B&B requirements. With the use of my parking apron I would have 2 covered spaces and 5 off street spaces.

We have been on Airbnb for 3 years and have a 5 star rating with a 100% positive reviews. According to Airbnb we are one of there favorite Capitola beach rentals. We have had guest from 6 countrys many return guest with many reserving a year in advance. I believe we are a great tourist asset to Capitola.

Gordon Hunt

Gordon Hunt

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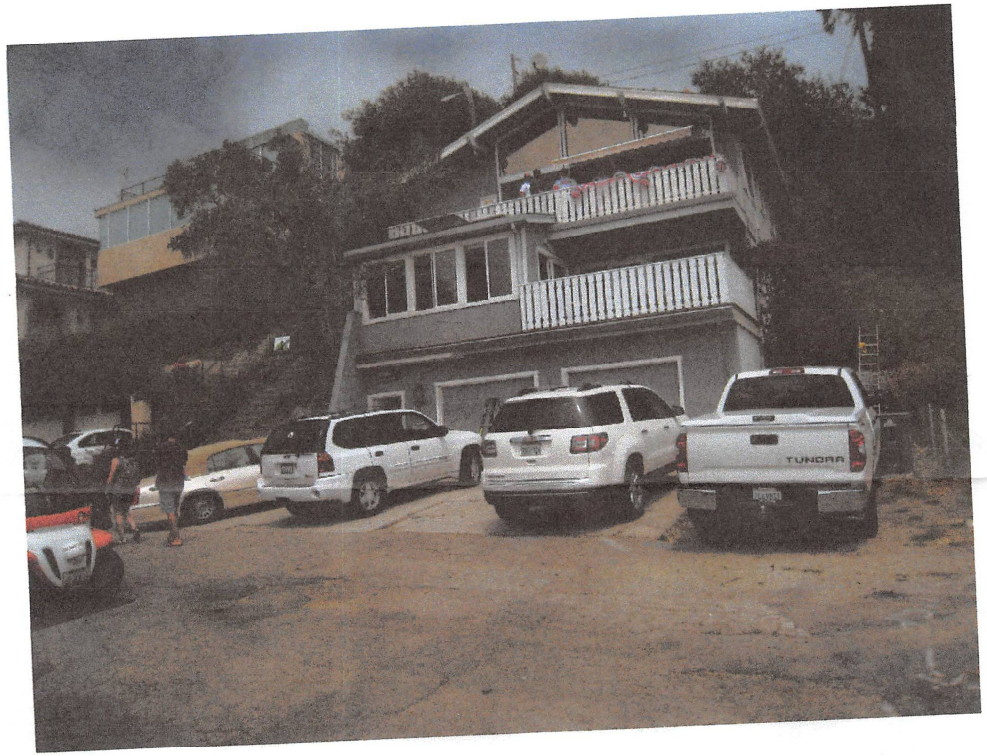
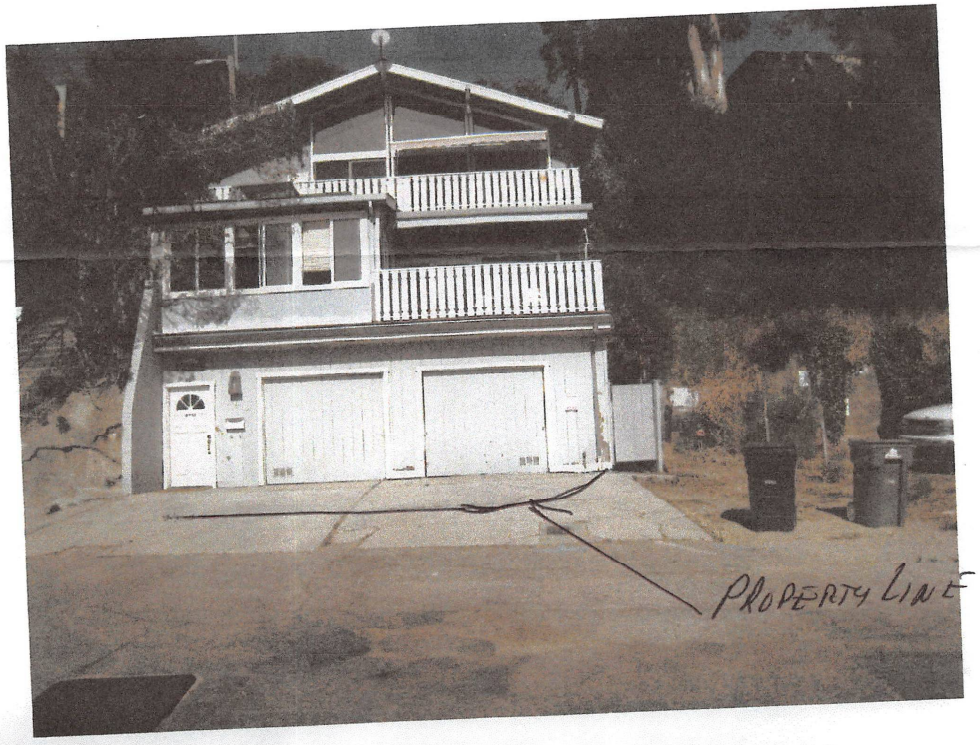
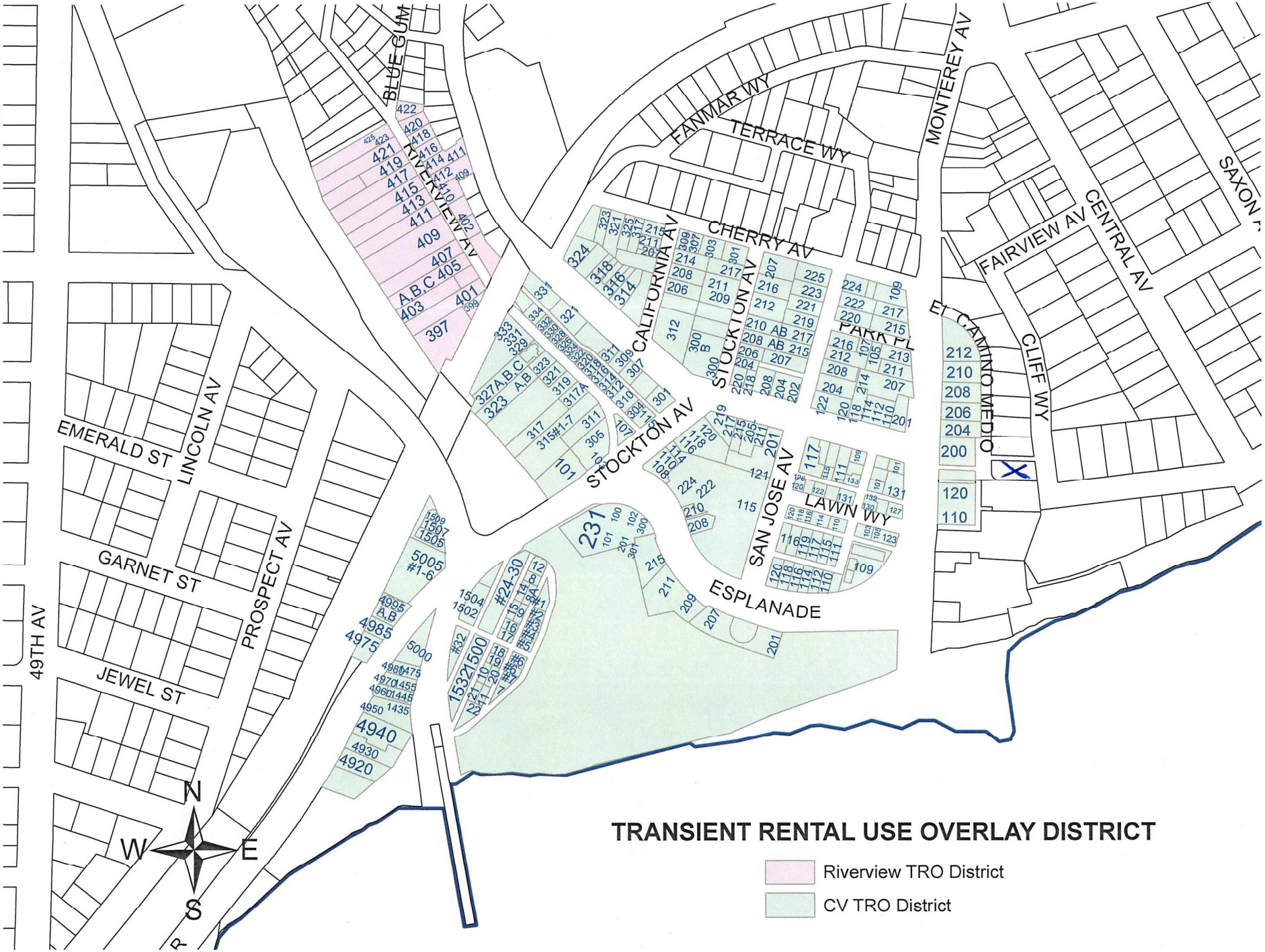
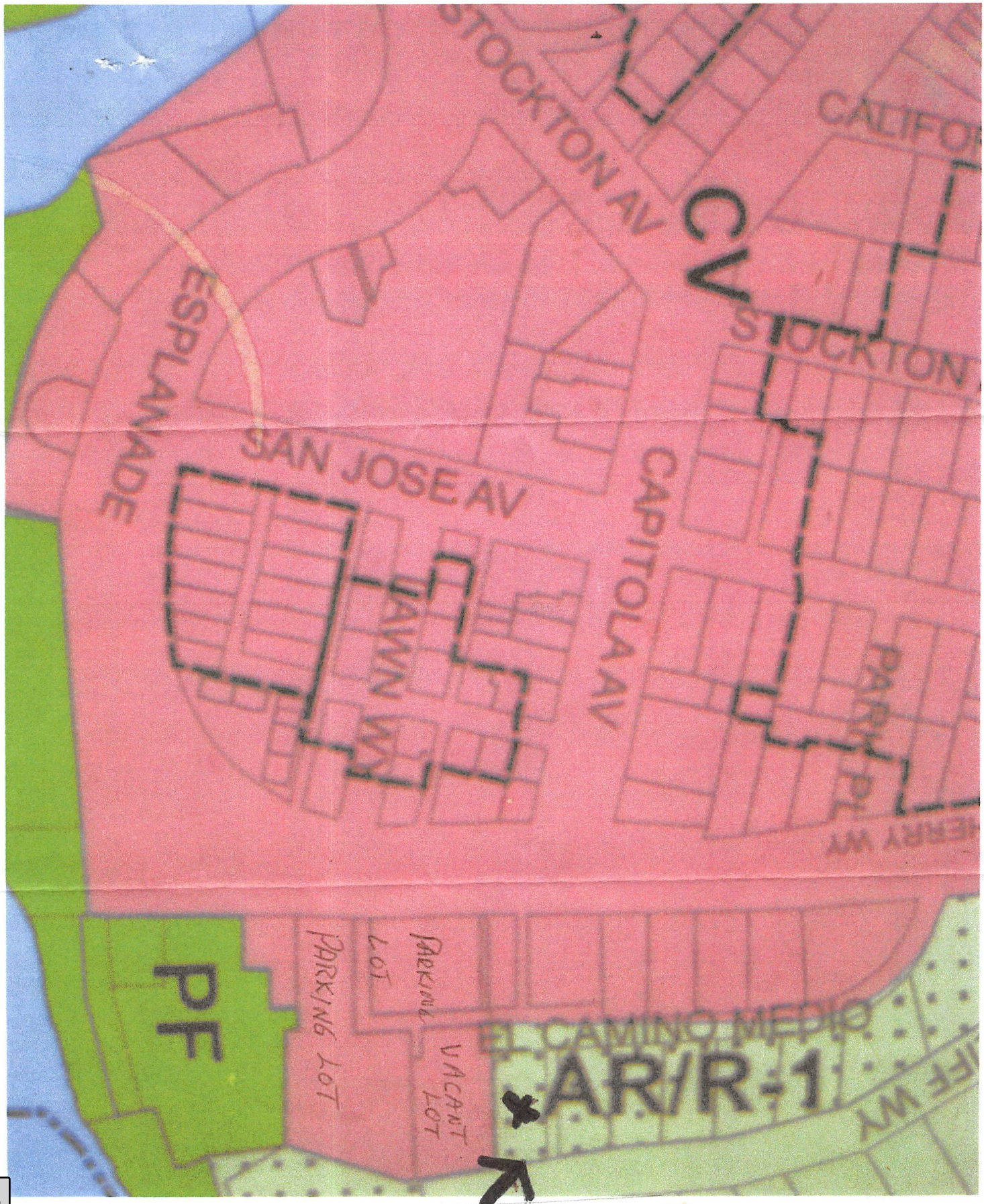


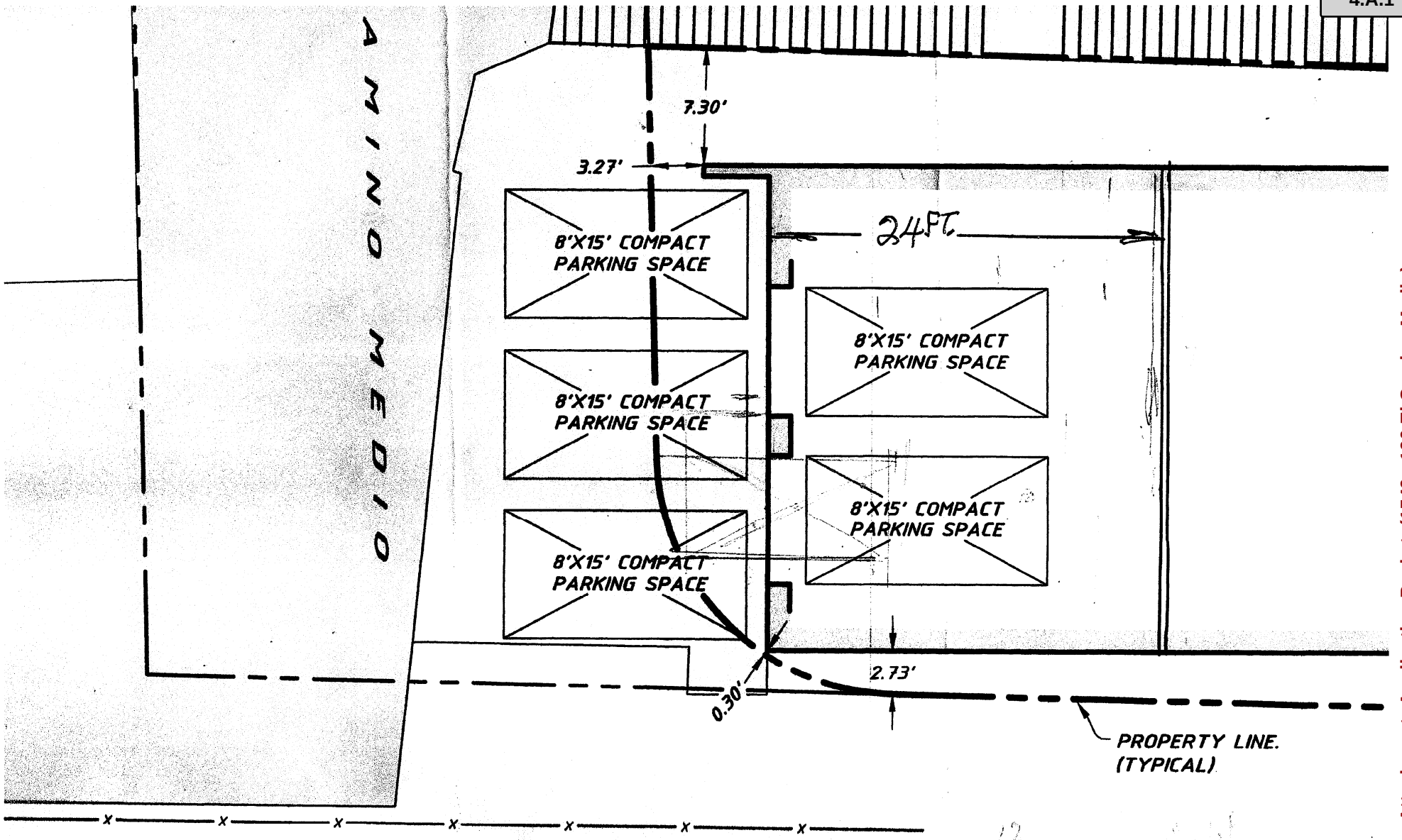


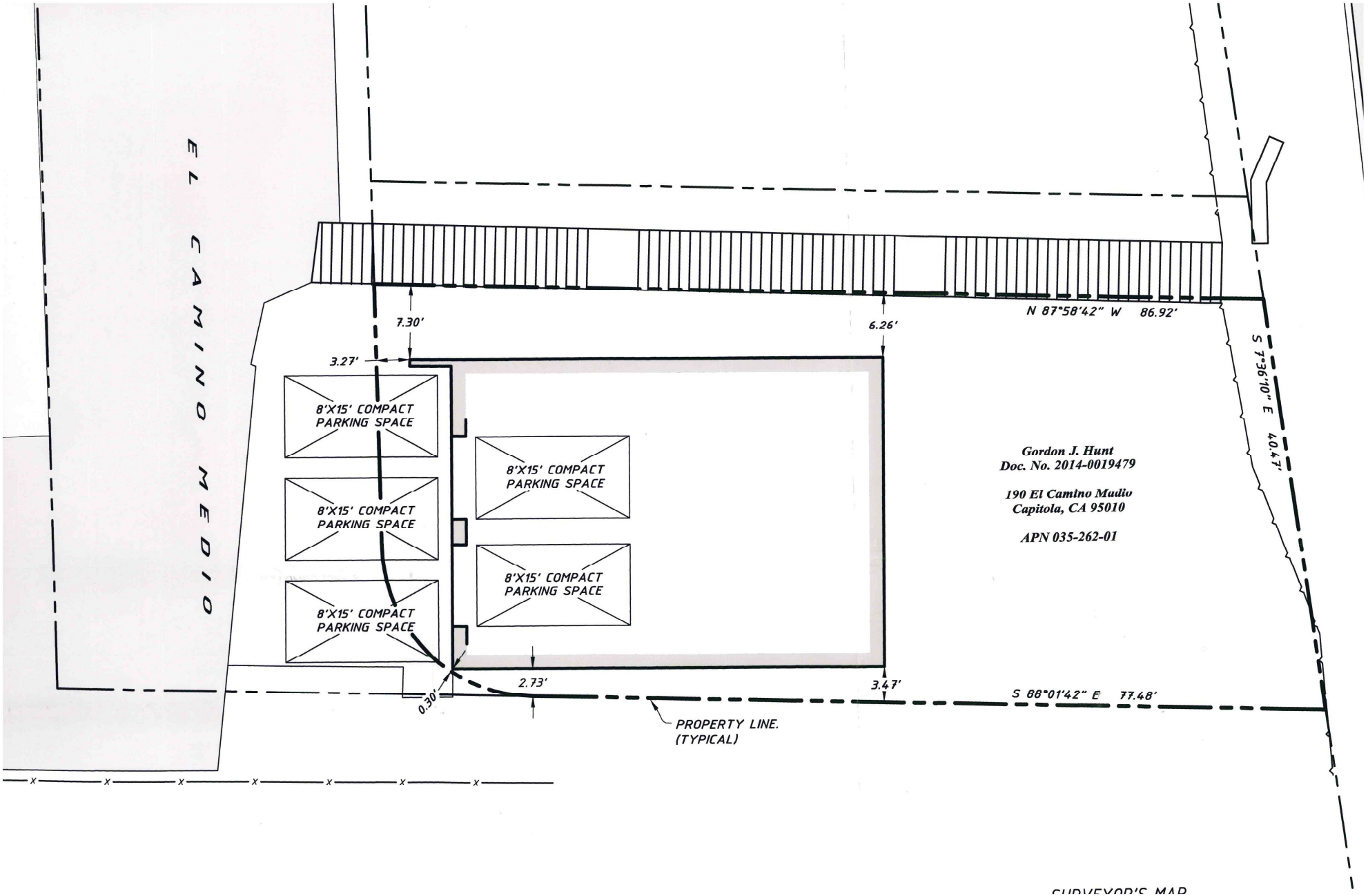




Gordon Hunt

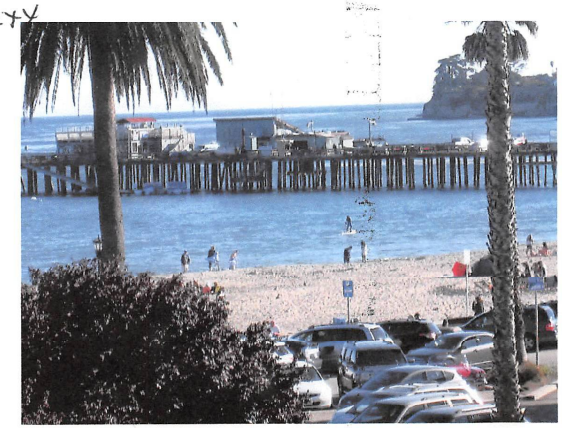
190 El Camino Medio





OFF STREET PARKING

2 GARAGE PARKING + 4 DRIVE PAD
~~4~~ GRASS AREA PARTIALLY MY PROPERTY



Planning Dept. City Of Capitola

Gordon Hunt
190 El Camino Medio
Capitola Ca 95010
gordonincapitola@yahoo.com

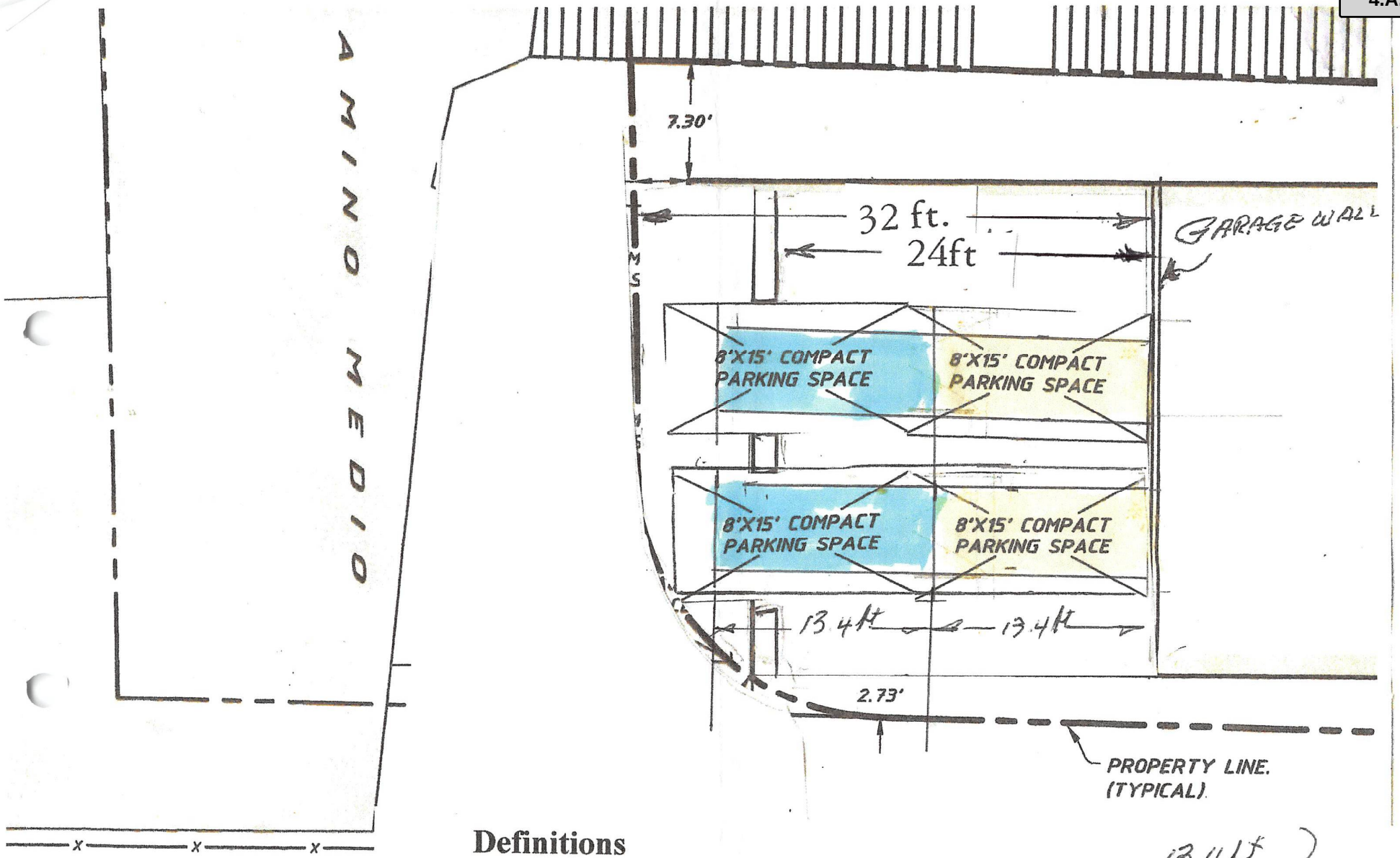
The Gray Whale Beach House has been on Airbnb for 3 years we have a 5 star rating with a 100% very faverable reviews. We have had guest from 6 different countrys some guest booking a year in advance. We meet all health and safety requirements with 2 garage parking spaces and 4 off street parking spaces.

We are in a R-1 district and requesting a use permit to operate a Bed & Breakfast. The breakfast will be a Continental Breakfast consisting 6 or more of the following items, Coffee, cereal, fresh fruit, bread, pastry, hard boiled egg, fruit juice, cheese, cold cuts, and necessary condiments. With advance notice we will offer any reasonable food request from our guest. Breakfast will be offered to rented guest only.

Attached is a survey as requested

Gordon Hunt
Homeowner

Kathleen Notch
Guest host



Definitions

13.4ft

Current compact car size, as defined by the United States Environmental Protection Agency (EPA), for the US and for international models respectively, is approximately 4,100 mm (161 in) and 4,450 mm (175 in) long for hatchbacks, or 4,400 mm (173 in) and 4,750 mm (187 in) long for convertibles, sedans (saloon) or station wagons (estate car). Multi-purpose vehicles and sport utility vehicles based on small family cars (often called compact MPVs and compact SUVs) have similar sizes, ranging from 4,200 mm (165 in) to 4,500 mm (177 in) in the U.S., and from 4,400 mm (173 in) to 4,700 mm (185 in) in international-based models.

STAFF REPORT

TO: PLANNING COMMISSION

FROM: COMMUNITY DEVELOPMENT

DATE: AUGUST 4, 2016

SUBJECT: **Verizon Wireless Communication Facility at 4400 Capitola Road #15-156 034-111-53**

Design Permit and Conditional Use Permit for the installation of a new Verizon wireless antenna and ancillary equipment on the roof of an existing commercial building in the PO (Professional Office) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit, which is not appealable to the California Coastal Commission.
Environmental Determination: Categorical Exemption
Property Owner: Lomak Property Group
Representative: Verizon Wireless – Nexius, filed 9/29/15

APPLICANT PROPOSAL

The applicant is proposing to construct two new cylindrical antennas on the roof of the existing office building at 4400 Capitola Road (AAA building). The proposed two foot tall antenna structures will sit roughly two and a half feet above the existing roof line. The proposed antennas will be visible from a public roadway (Capitola Road) and does not meet the location standards established by the Zoning Ordinance.

BACKGROUND

On September 29th, 2015, the applicant submitted a proposal for two new antenna facilities located on the roof of an existing professional office building. On October 7th, 2015, staff responded with an incomplete letter, stating that additional information and materials were required. On June 20th, 2016, the applicant submitted the remaining required information and the application was deemed complete.

ARCHITECTURAL AND SITE REVIEW HEARING

The Architectural and Site Review Committee reviewed the application on July 13th, 2016 and provided the applicant with the following direction:

Public Works Director, Steve Jesberg: Steve Jesberg was not present but asked planning staff to verify that all services are currently on-site and will not need to be re-directed from the street. The applicant verified this. Public Works had no other comments.

Building Official, Brian Van Son: Brian Van Son explained that the applicant will need to provide structural engineering to verify that the existing building can support the new facilities at time of building permit submittal. This has been added as Condition of Approval #13.

Local Architect, Frank Phanton: Frank Phanton had no concerns with the proposal.

Landscape Architect, Megan Bishop: Megan Bishop was not present. There is no landscaping proposed to be removed or installed as a part of this application.

City Planner, Ryan Safty: Ryan Safty asked the applicant to submit an electronic copy of the plan set. In addition, Mr. Safty asked that the applicant provide an explanation as to why a larger site in a more suitable zoning district wouldn't suffice to fill the gap in coverage.

Following the Architectural and Site Review hearing, the applicant submitted the electronic copy of the plans and submitted a statement as to why a larger site in a more suitable zoning district would not meet Verizon's coverage and capacity needs.

ANALYSIS

A wireless facility which is not co-locating, is located within the restricted zone setbacks, and does not incorporate stealth technology, requires a conditional use permit with a public hearing before the Planning Commission (§17.98.040). The Capitola Municipal Code restricts wireless antenna facilities from being located within 500 feet of a residential, public facility, commercial residential (CR), transient rental use, or parks and open space zoning district. In addition to the required 500 feet setback to restricted zones, the code also states that "in no event" may a new wireless facility be located within 300 feet of a restricted zoning district.

The proposed new small-cell wireless facility would be located along Capitola Road, in the PO (Professional Office) zoning district. The proposed site would be located within a restricted zone and would not comply with setbacks to restricted zone districts. The proposed wireless facility would be within 300 feet of the restricted land uses including: Multi-Family Residential, Single-Family Residential, and Commercial Residential. (Attachment 2)

The Telecom Act (Federal Telecommunications Act of 1996) states that local governments cannot prohibit personal wireless communication services. Although the Capitola Municipal Code states that in no event may a new facility be located within 300 feet of a restricted zoning district, the FCC's regulations pertaining to wireless telecommunication facilities may preempt the City's ability to deny a permit if the applicant can demonstrate that the City's regulations are tantamount to prohibiting the provision of wireless services. This Federal Act gives wireless applicants the ability to challenge the validity of local regulations if it can prove that the regulations are preventing them from filling a "significant gap" in its coverage. In order to be exempt from the code's setback restrictions, the applicant must be able to prove that the new facility would eliminate or substantially reduce a significant gap in the carrier's network and that there are no alternatives to the location and design of the facility that could reduce said gaps in the "least intrusive means" possible.

The Planning Commission also may not deny an application based on environmental effects of Radio Frequency (RF) emissions. According to Section 332(c) of the Communications Act, "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

Significant Gap Analysis

Verizon submitted existing and proposed cell coverage maps of Capitola and surrounding areas to illustrate that a gap exists in the current cell coverage. Verizon also included capacity demand graphs to illustrate that the demand of existing antennae facilities within City limits are

approaching capacity limits, and drive tests measuring service levels and data throughput within the area surrounding the proposed facility (Attachment 1).

According to Verizon representatives, the purpose of these small-cell "capacity sites" are to help offload data from nearby cell sites when they have reached their data capacity during busy periods of the day and their existing cell sites are (or will soon become) heavily exhausted with too many connected users and very low data speed. The specific purpose of this site along Capitola Road is to better serve the residences and commercial and government buildings east of the Capitola Mall.

The coverage, capacity, and drive test reports show that there is a lack of cellular coverage and capacity within this area of Capitola. Per the existing and proposed coverage maps, there is a lack of in-building LTE coverage within the area east of the Capitola Mall and the proposed new cell site will fix this gap in coverage. The capacity graphs show that existing capacity of the nearby "Live Oak" (off of Capitola Road, just south of Capitola Mall) facility and "Capitola" (off of Kennedy Drive, within the industrial park) sectors which currently serve the subject area are overloaded and have reached capacity exhaustion. The drive test report conducted from 5:00 to 6:00 pm on March 29, 2016, demonstrates that neighborhoods north, south, and east of the proposed facility are experiencing weak LTE signal, and slow data download speed is seen in all directions surrounding 4400 Capitola Road.

Least Intrusive Means Analysis

In addition to the applicant proving that a "significant gap" exists, the applicant must also demonstrate that their proposal constitutes the least intrusive means to mitigate a significant gap. The applicant must show that they have made an effort to identify and evaluate less intrusive alternatives that would most closely conform to the values of the local agency. Verizon must therefore demonstrate that they have considered alternative antenna and equipment designs and co-location or less sensitive site locations.

Design Review

The proposed wireless facility would consist of two, two foot tall antennas located on the roof of 4400 Capitola Road. The antennas are proposed on opposite ends of the building rooftop, one in the north-western corner and one in the south-eastern corner. The existing roof is 32 feet tall, and the total height of the antenna addition would be 34 feet – six inches. The antennas would be located within a canister screen to mimic the design of roof top vents. In addition to the antennas, the applicant is proposing to install ancillary equipment on the roof top, consisting of: two remote radio units (RRU), one mounted GPS antenna which will extend roughly one foot above the existing roof line, and power and fiber cables connecting the two antennas to the ancillary equipment. The applicant is proposing to install a six foot – two inch tall equipment cabinet on the ground, below the existing roof line in the south-eastern corner of the building.

The proposed wireless telecommunications facility at 4400 Capitola Road generally conforms to the Capitola Municipal Code design standards (Attachment 2). The proposal complies with the 35 foot height limit for structures in the Professional Office zone. The antennas are designed to mimic the design of a roof-top vent and will be substantially screened from public view due to mature landscaping along the property frontage and because the antenna will be mounted atop a two-story building. Due to the very limited visibility of the facility, staff does not believe additional camouflaging is necessary to conceal the antenna.

The ground-mounted equipment cabinet would be located on the back side of the building, away from view of pedestrians and vehicles traveling along Capitola Road. Although the new facility will be visible, it is a low profile structure which will not be visually intrusive.

Site Location

Per Verizon's capacity and coverage information, there is a gap in cell coverage east of 41st Avenue. In order to obtain an exception to construct the facility in a restricted zone setbacks, Verizon must prove that they have reviewed alternative locations.

Verizon focused their search along the along Capitola Road, between 42nd Avenue and 45th Avenue. This area is zoned Commercial Neighborhood and Professional Office, with residential uses surrounding it. In order to improve coverage in the target area while still maintaining some degree of setbacks to nearby restricted zoning, the applicant focused their search within the Capitola Road right-of-way and shopping area directly south.

The applicant provided an Alternative Site Analysis for the new antenna facility, which shows that they analyzed multiple utility poles locations and existing retail and office buildings. The proposed site at 4400 Capitola Road was the only site that would allow Verizon to lease space and also meet Verizon's height requirements for the new antennas to effectively reach the surrounding population.

Planning Staff analyzed Verizon's location information and researched alternative sites that could potentially help fill the alleged gap while better meeting the setback restriction. Staff requested that the applicant analyze a few commercial sites to the west, which would better meet restricted zone setback standards and be located in a preferred location preference per section 17.98.090 of the municipal code. Specifically, staff requested that applicant to analyze the Capitola Mall and Bank of America sites and explain why an antenna facility at these locations would not help fill the said coverage gap. Verizon explained that their existing facilities cover the Capitola Mall and Bank of America sites currently, and the purpose of this new small-cell site is to help serve the area east of the Capitola Mall as identified in their existing coverage map. Verizon stated that a small-cell site at this location at 4400 Capitola Road will better distribute cellular traffic to the coverage gap area than a macro (tall building or stand-alone tower) site at the mall or Bank of America to the west.

CEQA

This project is categorically exempt under Section 15301 of the California Environmental Quality Act. The proposed project involves the construction of a two new, small-cell Verizon wireless antenna facilities on to an existing building roof top. The project will result in a minor addition to the existing building. No adverse environmental impacts were discovered during project review by staff.

RECOMMENDATION

Staff recommends that the Planning Commission approve application #15-156 based on the following Conditions and Findings for Approval.

CONDITIONS OF APPROVAL

1. The project approval consists of a new, small-cell wireless antenna facility on to the roof of an existing office building at 4400 Capitola Road. The new antenna facility will consist of two, two foot tall canister antennas located on top of the existing two-story building, extending two feet-six inches over the existing roofline. The equipment cabinet will be located on the ground, behind the south-eastern corner of the building. The remaining ancillary will be located on the roof top. The proposed project is approved as indicated on the final plans reviewed and approved by the Planning Commission on August 4th, 2016, except as modified through conditions imposed by the

Planning Commission during the hearing.

2. All Planning fees associated with permit #15-156 shall be paid in full.

3. The applicant was granted a design permit, conditional use permit, and location exemption for the installation of a new, small-cell Verizon wireless antenna facility on the roof of an existing office building at 4400 Capitola Road. In any case where the conditions of the permit are not complied with, the community development director shall give notice thereof to the permittee, which notice shall specify a reasonable period of time within which to perform said conditions and correct said violation. If the permittee fails to comply with said conditions, or to correct said violation, within the time allowed, notice shall be given to the permittee of intention to revoke such permit at a hearing to be held not less than thirty calendar days after the date of such notice. Following such hearing and, if good cause exists therefore, the Planning Commission may revoke the permit.

4. The applicant must maintain a bond or other form of security to the City's satisfaction throughout the life of the project. The bond must be approved by the Community Development Director and be signed by both parties prior to building permit issuance.

5. The wireless communication facilities shall comply with all Federal Communication Commission (FCC) rules, regulations, and standards. Every two years the wireless telecommunications service provider shall submit to the director of community development: (1) a certification by a licensed engineer that the emissions are within the current FCC standards; and (2) a report on the level of cumulative radio frequency emissions within an eight hundred-foot radius from the subject antenna.

6. All roof-mounted facilities shall be painted with a non-reflective matte finish using an appropriate color that blends with the backdrop. The final choice of colors shall be approved by the community development department, in accordance with section 17.98.120 of the Capitola Municipal Code.

7. The wireless communications facilities shall be constructed and operated in such a manner as to minimize the amount of noise impacts to adjacent uses and activities. Backup generators shall only be operated during power outages and for testing and maintenance purposes. At any time, noise attenuation measures may be required by the director when deemed necessary.

8. Testing and maintenance activities of wireless communications facilities which generate audible noise shall occur between the hours of eight a.m. and five p.m., weekdays (Monday through Friday, non-holiday) excluding emergency repairs, unless allowed at other times by the director. Testing and maintenance activities, which do not generate audible noise, may occur at any time, unless otherwise prohibited by the director.

9. All wireless communications providers shall provide signage, as required by the director, which shall identify the name and phone number of the wireless communications provider for use in case of an emergency.

10. The new wireless communications facilities shall be maintained by the wireless service provider in good condition. This shall include keeping all wireless communications facilities graffiti free.

11. The height of the new antennas, including the existing building height, are 34 feet-six inches. This is the maximum height approved by the Planning Commission. Future facility upgrades or co-locations shall not exceed the approved height of 34 feet-six inches. Future facility updates shall not attach additional mass to the rooftop antenna facilities without the approval of the Planning Commission.

12. The proposed equipment cabinet located behind the building at ground level must not exceed six feet in height, pursuant to section 17.98.080.G.4 of the municipal code. The equipment cabinet must be redesigned, or located partially underground to comply with this requirement.

13. At time of Building Permit submittal, the wireless carrier applicant must submit equipment specifications for all proposed roof-mounted equipment in order for the Building Department to verify existing structure's load capacity. The Building Department may require a report prepared by a structural and electrical engineer.

14. The wireless communications facility which provides service to the general public shall be designed to survive a natural disaster without interruption in operation. To this end, the measures listed in section 17.98.200 of the Municipal Code shall be implemented.

15. Wireless communications providers shall provide the city with a notice of intent to vacate a site a minimum of thirty days prior to the vacation, and all other forms of cessation of operation on-site shall follow the rules and regulations set forth in Municipal Code section 17.98.210.

16. In the event that the original permittee (Verizon) sells its interest in a wireless communication facility, the succeeding carrier shall assume all responsibilities concerning the project and shall be held responsible to the city for maintaining consistency with all project conditions of approval, including proof of liability insurance. A new contact name for the project (#15-156) shall be provided by the succeeding carrier to the community development department within thirty days of transfer of interest of the facility.

17. This permit shall be valid for a period of ten years. An approval may be extended administratively from the initial approval date for a subsequent ten years and may be extended administratively every ten years thereafter upon the verification of the wireless communications provider's continued compliance with Municipal Code chapter 17.98 and with the findings and conditions of approval under which the application was originally approved. This does not apply to preexisting legal nonconforming uses.

18. Should the director determine that the wireless communications facility may no longer be in compliance, the director may, at his or her discretion, schedule a public hearing before the planning commission at which the planning commission may

modify or revoke an approval in accordance with chapter 17.98.240 of the Municipal Code.

19. All wireless communications facilities shall meet the current standards and regulations of the Federal Communications Commission, the California Public Utilities Commission, and any other agency of the federal or state government with the authority to regulate wireless communications providers. If such standards and regulations are changed, the wireless communications provider shall bring its facilities into compliance with such revised standards and regulations within ninety days of the effective date of such standards and regulations, unless a more stringent compliance schedule is mandated by the controlling federal or state agency. Failure to bring wireless communications facilities into compliance with such revised standards and regulations shall constitute grounds for the immediate removal of such facilities at the wireless communications provider's expense.

FINDINGS

A. **The application, subject to the conditions imposed, will secure the purposes of the Zoning Ordinance and General Plan.**
The Planning Commission reviewed and approved the application with conditions of approval with respect to the maintenance, design and operation of the use to ensure that the new wireless facility will not have a negative impact on the surrounding residential, commercial, and office uses and secures the general purposes of the Zoning Ordinance and General Plan.

B. **The application will maintain the character and integrity of the neighborhood.**
The Planning Commission reviewed and approved the application with conditions of approval to ensure that the antenna will not extend beyond the approved height of 34 feet-six inches (including existing building height) and will not be visually intrusive so as to preserve the character and identity of the commercial and office center and surrounding neighborhoods. The new equipment will mimic the design of a roof top vent, and is not located in a sensitive view corridor.

C. **This project is categorically exempt under the Section 15301 of the California Environmental Quality Act and is not subject to Section 753.5 of Title 14 of the California Code of Regulations**.
The proposed project involves the construction of a new, small-cell Verizon wireless antenna facility. The project will result in a minor modification and addition to the rooftop of an existing office building. Section 15301 exempts the minor alteration of existing facilities.

COASTAL FINDINGS

D. Findings Required. A coastal permit shall be granted only upon adoption of specific written factual findings supporting the conclusion that the proposed development conforms to the certified Local Coastal Program, including, but not limited to:

- The proposed development conforms to the City's certified Local Coastal Plan (LCP). The specific, factual findings, as per CMC Section 17.46.090 (D) are as follows:

(D) (2) Require Project-Specific Findings. In determining any requirement for public access, including the type of access and character of use, the city shall

evaluate and document in written findings the factors identified in subsections (D) (2) (a) through (e), to the extent applicable. The findings shall explain the basis for the conclusions and decisions of the city and shall be supported by substantial evidence in the record. If an access dedication is required as a condition of approval, the findings shall explain how the adverse effects which have been identified will be alleviated or mitigated by the dedication. As used in this section, "cumulative effect" means the effect of the individual project in combination with the effects of past projects, other current projects, and probable future projects, including development allowed under applicable planning and zoning.

(D) (2) (a) Project Effects on Demand for Access and Recreation. Identification of existing and open public access and coastal recreation areas and facilities in the regional and local vicinity of the development. Analysis of the project's effects upon existing public access and recreation opportunities. Analysis of the project's cumulative effects upon the use and capacity of the identified access and recreation opportunities, including public tidelands and beach resources, and upon the capacity of major coastal roads from subdivision, intensification or cumulative build-out. Projection for the anticipated demand and need for increased coastal access and recreation opportunities for the public. Analysis of the contribution of the project's cumulative effects to any such projected increase. Description of the physical characteristics of the site and its proximity to the sea, tideland viewing points, upland recreation areas, and trail linkages to tidelands or recreation areas. Analysis of the importance and potential of the site, because of its location or other characteristics, for creating, preserving or enhancing public access to tidelands or public recreation opportunities;

- The proposed wireless antenna project is proposed to be located on an existing office building at 4400 Capitola Road. There is no coastal access near the proposed site.

(D) (2) (b) Shoreline Processes. Description of the existing shoreline conditions, including beach profile, accessibility and usability of the beach, history of erosion or accretion, character and sources of sand, wave and sand movement, presence of shoreline protective structures, location of the line of mean high tide during the season when the beach is at its narrowest (generally during the late winter) and the proximity of that line to existing structures, and any other factors which substantially characterize or affect the shoreline processes at the site. Identification of anticipated changes to shoreline processes at the site. Identification of anticipated changes to shoreline processes and beach profile unrelated to the proposed development. Description and analysis of any reasonably likely changes, attributable to the primary and cumulative effects of the project, to: wave and sand movement affecting beaches in the vicinity of the project; the profile of the beach; the character, extent, accessibility and usability of the beach; and any other factors which characterize or affect beaches in the vicinity. Analysis of the effect of any identified changes of the project, alone or in combination with other anticipated changes, will have upon the ability of the public to use public tidelands and shoreline recreation areas;

- The proposed project is located along Capitola Road. The proposed wireless facility will not affect the public beach or shoreline.

(D) (2) (c) Historic Public Use. Evidence of use of the site by members of the general public for a continuous five-year period (such use may be seasonal). Evidence of the type and character of use made by the public (vertical, lateral,

blufftop, etc., and for passive and/or active recreational use, etc.). Identification of any agency (or person) who has maintained and/or improved the area subject to historic public use and the nature of the maintenance performed and improvements made. Identification of the record owner of the area historically used by the public and any attempts by the owner to prohibit public use of the area, including the success or failure of those attempts. Description of the potential for adverse impact on public use of the area from the proposed development (including but not limited to, creation of physical or psychological impediments to public use);

- There is not history of public use on the subject lot.

(D) (2) (d) Physical Obstructions. Description of any physical aspects of the development which block or impede the ability of the public to get to or along the tidelands, public recreation areas, or other public coastal resources or to see the shoreline;

- The proposed project is located on private property on Capitola Road. The project will not block or impede the ability of the public to get to or along the tidelands, public recreation areas, or views to the shoreline.

(D) (2) (e) Other Adverse Impacts on Access and Recreation. Description of the development's physical proximity and relationship to the shoreline and any public recreation area. Analysis of the extent of which buildings, walls, signs, streets or other aspects of the development, individually or cumulatively, are likely to diminish the public's use of tidelands or lands committed to public recreation. Description of any alteration of the aesthetic, visual or recreational value of public use areas, and of any diminution of the quality or amount of recreational use of public lands which may be attributable to the individual or cumulative effects of the development.

- The proposed project is located on private property rooftop and will not impact access and recreation. The project does not diminish the public's use of tidelands or lands committed to public recreation nor alter the aesthetic, visual or recreational value of public use areas.

(D) (3) (a – c) Required Findings for Public Access Exceptions. Any determination that one of the exceptions of subsection (F) (2) applies to a development shall be supported by written findings of fact, analysis and conclusions which address all of the following:

a. The type of access potentially applicable to the site involved (vertical, lateral, bluff top, etc.) and its location in relation to the fragile coastal resource to be protected, the agricultural use, the public safety concern, or the military facility which is the basis for the exception, as applicable;

b. Unavailability of any mitigating measures to manage the type, character, intensity, hours, season or location of such use so that agricultural resources, fragile coastal resources, public safety, or military security, as applicable, are protected;

c. Ability of the public, through another reasonable means, to reach the same area of public tidelands as would be made accessible by an access way on the subject land.

- The project is not requesting a Public Access Exception, therefore these findings do not apply.

(D) (4) (a – f) Findings for Management Plan Conditions. Written findings in support of a condition requiring a management plan for regulating the time and manner or character of public access use must address the following factors, as applicable:

a. Identification and protection of specific habitat values including the reasons supporting the conclusions that such values must be protected by limiting the hours, seasons, or character of public use;

- The project is located at 4400 Capitola Road. The proposal consists of a minor structural addition to an existing roof top. The use will not be limited to seasons or hours. The project is required to comply with FCC regulations related to environmental and public health and safety.

b. Topographic constraints of the development site;

- The project is located on a flat lot.

c. Recreational needs of the public;

- The project does not impact recreational needs of the public, however it will be visible from Capitola Road public right-of-way.

d. Rights of privacy of the landowner which could not be mitigated by setting the project back from the access way or otherwise conditioning the development;

e. The requirements of the possible accepting agency, if an offer of dedication is the mechanism for securing public access;

f. Feasibility of adequate setbacks, fencing, landscaping, and other methods as part of a management plan to regulate public use.

(D) (5) Project complies with public access requirements, including submittal of appropriate legal documents to ensure the right of public access whenever, and as, required by the certified land use plan and Section 17.46.010 (coastal access requirements);

- No legal documents to ensure public access rights are required for the proposed project

(D) (6) Project complies with visitor-serving and recreational use policies;

SEC. 30222

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

- The project is proposed to be located on an existing office building (zoned Professional Office) lot of record.

SEC. 30223

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

- The project is proposed to be located on an existing private property office-use lot of record.

c) Visitor-serving facilities that cannot be feasibly located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

- The project is proposed to be located on an existing professional office-use lot of record.

(D) (7) Project complies with applicable standards and requirements for provision of public and private parking, pedestrian access, alternate means of transportation and/or traffic improvements;

- The project involves an antenna addition to an existing office building. The proposal does not affect parking, and thus complies with applicable standards and requirements for provision for parking, pedestrian access, and alternate means of transportation and/or traffic improvements.

(D) (8) Review of project design, site plan, signing, lighting, landscaping, etc., by the city's architectural and site review committee, and compliance with adopted design guidelines and standards, and review committee recommendations;

- The project complies with the design guidelines and standards established by the Municipal Code.

(D) (9) Project complies with LCP policies regarding protection of public landmarks, protection or provision of public views; and shall not block or detract from public views to and along Capitola's shoreline;

- The project will not negatively impact public landmarks and/or public views. The project will not block public views to and along Capitola's shoreline, however it will be slightly visible to the public from Capitola Road.

(D) (10) Demonstrated availability and adequacy of water and sewer services;

- The project is located on a legal lot of record with available water and sewer services.

(D) (11) Provisions of minimum water flow rates and fire response times;

- The project is located within close proximity of the Capitola fire department. Water is available at the location.

(D) (12) Project complies with water and energy conservation standards;

- The project is for a new small-cell wireless antenna facility. No water fixtures are proposed.

(D) (13) Provision of park dedication, school impact, and other fees as may be required;

- The project will be required to pay appropriate fees prior to building permit issuance.

(D) (14) Project complies with coastal housing policies, and applicable ordinances including condominium conversion and mobile home ordinances;

- The project does not involve a condo conversion or mobile homes.

(D) (15) Project complies with natural resource, habitat, and archaeological protection policies;

- Conditions of approval have been included to ensure compliance with established policies.

(D) (16) Project complies with Monarch butterfly habitat protection policies;

- The project is outside of any identified habitats where Monarch Butterflies have been encountered, identified and documented.

(D) (17) Project provides drainage and erosion and control measures to protect marine, stream, and wetland water quality from urban runoff and erosion;

- Conditions of approval have been included to ensure compliance with applicable erosion control measures.

(D) (18) Geologic/engineering reports have been prepared by qualified professional for projects in seismic areas, geologically unstable areas, or coastal bluffs, and project complies with hazard protection policies including provision of appropriate setbacks and mitigation measures;

- Geologic/engineering reports are not required for this application. Conditions of approval have been included to ensure the project applicant shall comply with all applicable requirements of the most recent version of the California Building Standards Code.

(D) (19) All other geological, flood and fire hazards are accounted for and mitigated in the project design;

- Conditions of approval have been included to ensure the project complies with geological, flood, and fire hazards and are accounted for and will be mitigated in the project design.

(D) (20) Project complies with shoreline structure policies;

- The proposed project is not located along a shoreline.

(D) (21) The uses proposed are consistent with the permitted or conditional uses of the zoning district in which the project is located;

- The use is not allowed where it is proposed, being that it is within 500 feet of a restricted residential zone. An exception was made to the location standards due to the “significant gap” and “least intrusive means” findings.

(D) (22) Conformance to requirements of all other city ordinances, zoning requirements, and project review procedures;

- The project does not conform in that it is proposed in a restricted area.

(D) (23) Project complies with the Capitola parking permit program as follows:

- The project will not affect the Capitola parking permit program.

ATTACHMENTS:

1. Verizon Project Plans and Information
2. Site Planning and Zoning Review
3. Wireless Facility Findings of Approval

Prepared By: Ryan Safty
Assistant Planner

verizonwireless

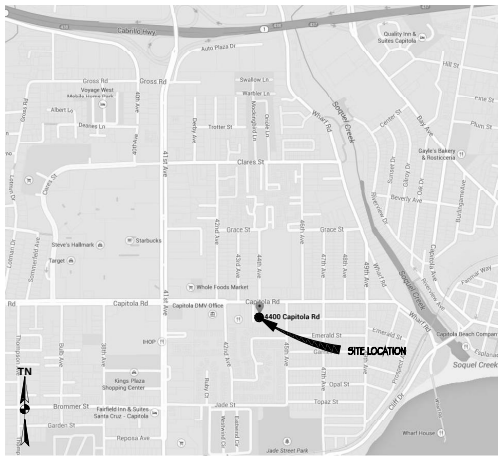
CAPITOLA MALL SC2

4400 CAPITOLA RD
CAPITOLA, CA 95010

SITE INFORMATION

OWNER:	-
APPLICANT:	VERIZON WIRELESS 2785 MITCHELL DRIVE, SUITE #9 WALNUT CREEK, CA 94598
AGENT:	NEXIUS 1301 CENTRAL EXPRESSWAY SOUTH, SUITE #200 ALLEN, TX 75013 (703) 650-7777
APN:	034-111-53
SITE ADDRESS:	4400 CAPITOLA RD CAPITOLA, CA 95010
COUNTY:	SANTA CRUZ
LATITUDE:	36° 58' 24.31 N (36.973419) NAD 83
LONGITUDE:	121° 57' 39.00" W (-121.960833) NAD 83
GROUND ELEVATION:	±51.8' AMSL
ZONING:	BUSINESS COMMERCIAL
ZONING JURISDICTION:	CITY OF CAPITOLA

VICINITY MAP



CODE COMPLIANCE

CONSTRUCTION WORKS & MATERIALS MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE & LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

1. 2013 CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25)
2. 2013 CALIFORNIA BUILDING CODE
3. 2013 CALIFORNIA ELECTRICAL CODE
4. 2013 CALIFORNIA MECHANICAL CODE
5. 2013 CALIFORNIA PLUMBING CODE
6. 2013 CALIFORNIA FIRE CODE
7. LOCAL BUILDING CODES
8. CITY/COUNTY ORDINANCES
9. ANSI/EIA-TIA-222-G

HANDICAP REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE ADMINISTRATIVE CODE, TITLE 24 PART 2, SECTION 11058.3.4.2, EXCEPTION 1

DRIVING DIRECTIONS

DIRECTIONS FROM VERIZON WIRELESS WALNUT CREEK OFFICE

FROM: 2785 MITCHELL DR, WALNUT CREEK, CA 94598
TO: 4400 CAPITOLA RD, CAPITOLA, CA 95010

1.	HEAD NORTHEAST ON MITCHELL DR TOWARD OAK GROVE RD	30 FT
2.	TURN RIGHT ONTO OAK GROVE RD	0.4 MI
3.	TURN RIGHT ONTO YGNACIO VALLEY RD	3.4 MI
4.	YGNACIO VALLEY RD TURNS SLIGHTLY RIGHT AND BECOMES HILLSIDE AVE	0.1 MI
5.	TURN LEFT ONTO THE INTERSTATE 680 S RAMP TO SAN JOSE	0.5 MI
6.	MERGE ONTO I-680 S	33.5 MI
7.	TAKE THE MISSION BLVD / STATE ROUTE 262 EXIT TOWARD I-880	0.2 MI
8.	KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR MISSION BLVD W AND MERGE ONTO MISSION BLVD	0.9 MI
9.	KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR INTERSTATE 880 S / SAN JOSE AND MERGE ONTO I-880 S	15.0 MI
10.	CONTINUE ONTO CA-17 S	26.3 MI
11.	TAKE THE CALIFORNIA 1 S EXIT TOWARD WATSONVILLE / MONTEREY	0.7 MI
12.	MERGE ONTO CA-1 S	2.6 MI
13.	TAKE THE 41ST AVE EXIT	0.3 MI
14.	TURN RIGHT ONTO 41ST AVE	0.5 MI
15.	TURN LEFT ONTO CAPITOLA RD	0.2 MI
16.	TURN RIGHT, DESTINATION WILL BE ON LEFT	112 FT

END AT: 4400 CAPITOLA RD, CAPITOLA, CA 95010

ESTIMATED TIME: 1 HR 37 MIN ESTIMATED DISTANCE: 62.3 MI

PROJECT TEAM

AGENT:

BOB GUNDERMANN
BEACON DEVELOPMENT
1757 GREENWOOD ROAD
PLEASANTON, CA 94566
(925) 699-1999
BOB@BEACONDEV.NET

PROJECT MANAGER:

JENNIFER HAAS
NEXIUS
1301 CENTRAL EXPRESSWAY SOUTH, SUITE #200
ALLEN, TX 75013
(650) 759-1377
JENNIFER.HAAS@NEXIUS.COM

CONSTRUCTION MANAGER:

ZACHARY MANN
NEXIUS
1301 CENTRAL EXPRESSWAY SOUTH, SUITE #200
ALLEN, TX 75013
(650) 754-5452
ZACHARY.MANN@NEXIUS.COM

ARCHITECT/ENGINEER ON RECORD:

BRET McCOMB
PRECISION DESIGN & DRAFTING INC.
11768 ATWOOD ROAD, SUITE #20
AUBURN, CA 95603
(530) 823-6546
BRET@PDND.COM

VERIZON PROJECT MANAGER:

MAUREEN CRUZEN
(925) 279-6638
MAUREEN.CRUZEN@VERIZONWIRELESS.COM

PROJECT DESCRIPTION

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR VERIZON WIRELESS CONSISTING OF THE INSTALLATION & OPERATION OF ANTENNAS & ASSOCIATED EQUIPMENT OF AN (E) ROOFTOP.

SCOPE OF WORK:

1. INSTALL (F) TELECOMMUNICATIONS EQUIPMENT BOXES ON AN (E) ROOFTOP. EQUIPMENT INSTALLED CONSISTS OF (6) (F) RRUS, (6) GPS ANTENNA, & (2) (F) AMPHENOL CYLINDRICAL ANTENNAS ON (F) ANTENNA MASTS
2. (F) CHARLES CABINET MOUNTED ON (F) CONCRETE SLAB ON SOUTHEAST CORNER OF BUILDING
3. ALL EQUIPMENT TO BE PAINTED TO MATCH (E) BUILDING
4. (E) POINT OF CONNECTION FOR POWER TO BE PULLED FROM (E) FIRST FLOOR SWITCH GEAR IN (E) ELECTRICAL ROOM
5. (E) POINT OF CONNECTION FOR FIBER TO BE PULLED FROM (E) TELCO BOARD ON FIRST FLOOR IN (E) ELECTRICAL ROOM

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
T-2	GENERAL NOTES, LEGEND, & ABBREVIATIONS
C-1	SITE SURVEY
A-1	SITE PLAN
A-2	EQUIPMENT PLAN & ANTENNA PLAN A
A-3	ANTENNA PLAN B
A-4	ELEVATIONS
A-5	ELEVATIONS
A-6	DETAILS

At all services & grounding trenches, provide "WARNING" tape at 12" below grade.

CALL "CALL BEFORE YOU DIG" 811/800-227-2600
NATIONWIDE UNDERGROUND SERVICE ALERT

ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME IF USING 11"X 17" PLOT, DRAWINGS WILL BE HALF SCALE.

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE, SUITE #9
WALNUT CREEK, CA 94598

PRECISION DESIGN & Drafting, INC.
Phone: (530) 823-6546 · www.pdnd.com
11768 Atwood Rd, Suite 20 Auburn, CA 95603

NEXIUS
1301 CENTRAL EXPRESSWAY SOUTH
SUITE #200
ALLEN, TX 75013
(703) 650-7777
WWW.NEXIUS.COM

REGISTERED PROFESSIONAL ENGINEER BRET A. McCOMB C 69891 EXP 09-30-16 CIVIL STATE OF CALIFORNIA

CAPITOLA MALL SC2

4400 CAPITOLA RD
CAPITOLA, CA 95010

ISSUE STATUS

△	DATE	DESCRIPTION
	04/09/15	ZD 90%
	07/11/15	ZD 100%

DRAWN BY: G. WATKINS
CHECKED BY: T. LAWRENCE / M. WEIS
APPROVED BY: B. McCOMB
DATE: 07/11/15
SHEET TITLE: TITLE SHEET
SHEET NUMBER: T-1

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)

GENERAL CONSTRUCTION NOTES

1. PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC/UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYORS MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IS ANY DISCREPANCY IS FOUND BETWEEN THE CARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ ENGINEER.
7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
8. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
9. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT/ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT.ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PREFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
11. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED/ DISRUPTED DURING CONSTRUCTION SHALL BE RETURNED TO ITS ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT/ ENGINEER AT COMPLETION OF PROJECT.
13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC, SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
14. INCLUDE MISC ITEMS PER VERIZON WIRELESS SPECIFICATIONS.

GENERAL NOTES FOR EXISTING CELL SITES

1. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
2. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
3. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
4. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
5. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
6. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

APPLICABLE CODES, REGULATIONS, AND STANDARDS

1. SUBCONTRACTORS WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.
2. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
3. SUBCONTRACTORS WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

   -AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   -AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
   -TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
   -INSTITUTION FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT
   -IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")
4. TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS AND TELCORDIA GR-63 NETWORK EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
   TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
   TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
   TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS
5. ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS
6. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

GENERAL TRENCHING NOTES

1. MAINTAIN 40" MINIMUM COVER FOR ALL ELECTRICAL CONDUITS.
2. MAINTAIN 30" MINIMUM COVER FOR ALL TELECOMMUNICATIONS CONDUITS.
3. MINIMUM 1" SAND SHADING BELOW CONDUITS, AND 6" COVERING ON TOP OF CONDUITS REQUIRED.
4. ALL ELECTRICAL CONDUITS FROM POWER COMPANY FROM ANY POLE, TRANSFORMER OR OTHER LOCATIONS WILL BE SLURRY BACKFILLED.
5. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
6. IN DIRT SLURRY 18" FROM GRADE AND FILL 95% COMPACTION NATIVE SOIL FOR BALANCE
7. WARNING TAPE TO BE PLACED IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE RING.

GENERAL GROUNDING NOTES

1. 5/8" x 10' ROD, CAD WELD BELOW GRADE
2. GROUND TESTED AT 5 OHMS OR LESS.
3. #5 GROUND AND BOND WIRE.
4. GROUNDS 3" FROM POLE.
5. PLACE 3 #10 GA WIRES FROM TESCO BREAKER TO PBMD OR STRONG BOX.
6. WOOD MOULDING, STAPLED EVERY 3" AND AT EACH END.

GENERAL CONDUIT NOTES

1. ALL CONDUITS WILL BE MANDRELED AND EQUIPPED WITH 3/8" PULL ROPE.
2. SCHEDULE 40 CONDUIT FOR UNDERGROUND USE.
3. SCHEDULE 80 CONDUIT FOR RISER USE.
4. 2" GALVANIZED STEEL CONDUIT FOR ANY CONDUIT UNDER 3", STUB UP 10' THEN CONVERT TO SCHEDULE 80.
5. CONVERT 4" CONDUIT TO 3" AT BASE OF POLE.
6. CONTRACTOR TO STUB UP POLE 10' w/ 3" POWER CONDUIT. POWER COMPANY TO CONVERT FROM 3" STUB SCHEDULE 80 TO 2" SCHEDULE 80 FROM TOP OF STUB UP.

TYPICAL R.O.W. POLE CONSTRUCTION NOTES

1. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE.
2. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
3. NO BOLT THREADS TO PROTRUDE MORE THAN 1-1/2"
4. ALL HOLES IN POLE LEFT FROM REARRANGEMENT OF CLIMBERS TO BE FILLED.
5. 90° SHORT SWEEPS UNDER ANTENNA ARM, ALL CABLES MUST TRANSITION ON THE INSIDE OR BOTTOM OF THE ARM (NO CABLE ON TOP OF ARM).
6. USE 90° CONNECTOR AT CABLE CONNECTION FOR OMNI DOWN ANTENNAS.
7. USE CABLE CLAMPS TO SECURE CAB;LE TO ARMS, PLACE 2" T-MOBILE CABLE I.D. TAGS ON BOTH SIDES OF ARMS.
8. USE 1/2" DIA. CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
9. PLACE GPS ON ARM OF SOUTHERN SKY EXPOSURE AT MINIMUM 6" FROM TRANSMIT ANTENNA WHICH IS 24" AWAY FROM CENTER OF POLE.
10. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

SYMBOLS LEGEND

NEW ANTENNA
EXISTING ANTENNA
GROUND ROD
GROUND BUSS BAR
MECHANICAL GRND. CONN.
GROUND ACCESS WELL
E — ELECTRIC BOX
T — TELEPHONE BOX
LIGHT POLE
FND. MONUMENT
SPOT ELEVATION
SET POINT
1 — REVISION
X — GRID REFERENCE
X / X-X — DETAIL REFERENCE
X / X-X — ELEVATION REFERENCE
X / X-X — SECTION REFERENCE

GROUT OR PLASTER
(E) BRICK
(E) MASONRY
CONCRETE
EARTH
GRAVEL
PLYWOOD
SAND
WOOD CONT.
WOOD BLOCKING
STEEL
CENTERLINE
PROPERTY/LEASE LINE
MATCH LINE
WORK POINT
GROUND CONDUCTOR
— A — COAXIAL CABLE
— O/U — OVERHEAD SERVICE CONDUCTORS
— X — X — CHAIN LINK FENCING
— OHT/OHP — OVERHEAD TELEPHONE/OVERHEAD POWER
— OHT — OVERHEAD TELEPHONE LINE
— OHP — OVERHEAD POWER LINE
— E — E — POWER RUN

— T — TELCO RUN
— T/E — POWER/TELCO RUN
— G — GROUNDING CONDUCTOR
GROUNDING CONDUCTOR
CONDUIT UNDERGROUND
FUSE, SIZE AND TYPE AS INDICATED.
SAFETY SWITCH, 2P-240V-60A W/60A FUSES, NEMA 3R ENCLOSURE, SQ D CATALOG NO. H222NRB
MANUAL TRANSFER SWITCH, 2P-240V-200A, NO FUSE, NEMA 3R ENCLOSURE
LIGHTING FIXTURE, FLUORESCENT, 10.94" x 4'-0", 2/40W, SURFACE MOUNTING TYPE, HUBBELL LIGHTING CATALOG #WSW232T
LIGHTING FIXTURE, FLUORESCENT, 10.94" x 8'-0", 2/95W, SURFACE MOUNTING TYPE, HUBBELL LIGHTING CATALOG #TWSM232T
LIGHTING FIXTURE, HIGH PRESSURE SODIUM, 1/70W, WALL MOUNTING TYPE, HUBBELL LIGHTING CATALOG #NRG-307 OR 1/50W, HUBBELL LIGHTING CATALOG #NRG-121
EXIT SIGN, THERMOPLASTIC LED, SINGLE FACE, UNIVERSAL MOUNTING, W/BATTERY PACK, HUBBELL LIGHTING CATALOG #PRB
EXIT — COMBINATION, EXIT SIGN & EMERGENCY LIGHTING, HUBBELL LIGHTING CATALOG #PRC
EMERGENCY LIGHTING, 2/50W, HUBBELL LIGHTING CATALOG #HEG-50-2-R91
LIGHTING FIXTURE, INCANDESCENT, 1/100W, WALL MOUNTING TYPE, HUBBELL LIGHTING CATALOG #BRH-100-06-1
LIGHTING FIXTURE, HALOGEN, QUARTZ, 1/300W, HUBBELL LIGHTING CATALOG #QL-505
LIGHTING FIXTURE, 1/175W. METAL HALIDE, HUBBELL CAT #MIC-0175H-336
5/8" X 10'-0" ,CU. GND ROD 18" MIN. BELOW GRADE.

5/8" X 10'-0" ,CU. GND ROD IN TEST WELL 18" MIN. BELOW GRADE.
CHEMICAL GROUND ROD (XIT GROUND ROD)
CADWELD CONNECTION
MECHANICAL CONNECTION
HALO GROUND CONNECTION
CIRCUIT BREAKER
M — UTILITY METER BASE
TRANSFORMER
T — STEPDOWN TRANSFORMER
RECEPTACLE, 2P-3W-125V-15A, DUPLEX, GROUND TYPE, HUBBELL CATALOG #5362
S — TOGGLE SWITCH, 1P-125V-15A, HUBBELL CATALOG #HBL 1201CN
S WP — TOGGLE SWITCH, 1P-120V-15A, "WP"
S — IONIZATION SMOKE DETECTOR W/ALARM HORN & AUXILIARY CONTACT, 120 VAC, GENTEX PART NO. 7100F
POLE
(P) POLE MOUNTED XFMER
(E) POLE MOUNTED XFMR
(P) PAD MOUNTED XFMER
(E) PAD MOUNTED XFMER

ABBREVIATIONS

A	AMPERE	HT.	HEIGHT
A.B.	ANCHOR BOLT	ICGB.	ISOLATED COPPER GROUND BUSS
ABV.	ABOVE	IN.(")	INCH(ES)
ACCA	ANTENNA CABLE COVER ASSEMBLY	INT.	INTERIOR
ADD'L	ADDITIONAL	LB.(#)	POUND(S)
A.F.F.	ABOVE FINISHED FLOOR	L.B.	LAG BOLTS
A.F.G.	ABOVE FINISHED GRADE	L.F.	LINEAR FEET (FOOT)
AIC	AMPERE INTERRUPTING CAPACITY	LG.	LENGTH
ALUM.	ALUMINUM	L.	LONG(ITUDINAL)
ALT.	ALTERNATE	LPS	LOW PRESSURE SODIUM
ANT.	ANTENNA	MAS.	MASONRY
APPROX.	APPROXIMATE(LY)	MAX.	MAXIMUM
ARCH.	ARCHITECT(URAL)	M.B.	MACHINE BOLT
AT.	AMPERE TRIP	MECH.	MECHANICAL
AWG.	AMERICAN WIRE GAUGE	MFR.	MANUFACTURER
BATT.	BATTERY	MIN.	MINIMUM
BD.	BOARD	MISC.	MISCELLANEOUS
BLDG.	BUILDING	MLO	MAIN LUGS ONLY
BLK.	BLOCK	MTD.	MOUNTED
BLKG.	BLOCKING	MTG.	MOUNTING
BM.	BEAM	MTL.	METAL
B.N.	BOUNDARY NAILING	MTS.	MANUAL TRANSFER SWITCH
BR.	BRANCH	N	NEUTRAL
BRKR.	BREAKER	(P)	NEW
BTCW.	BARE TINNED COPPER WIRE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
BTS.	BASE TRANSMISSION SYSTEM	NO.(#)	NUMBER
B.O.F.	BOTTOM OF FOOTING	N.T.S.	NOT TO SCALE
B/U	BACK-UP CABINET	OH	OVERHEAD
C	CONDUIT	O.C.	ON CENTER
CAB.	CABINET	OPNG.	OPENING
CANT.	CANTILEVER(ED)	P	POLE
CB.	CIRCUIT BREAKER	P/C	PRECAST CONCRETE
C.I.P.	CAST IN PLACE	PCS	PERSONAL COMMUNICATION SERVICES
CKT.	CIRCUIT	PH	PHASE
CLG.	CEILING	PLY.	PLYWOOD
CLR.	CLEAR	PNLBD	PANELBOARD
COL.	COLUMN	PPC	POWER PROTECTION CABINET
CONC.	CONCRETE	PRC	PRIMARY RADIO CABINET
CONN.	CONNECTION(OR)	PRI	PRIMARY
CONST.	CONSTRUCTION	P.S.F.	POUNDS PER SQUARE FOOT
CONT.	CONTINUOUS	P.S.I.	POUNDS PER SQUARE INCH
d	PENNY (NAILS)	P.T.	PRESSURE TREATED
DBL.	DOUBLE	PWR.	POWER (CABINET)
DEM.	DEMAND	QTY.	QUANTITY
DEPT.	DEPARTMENT	RAD.(R)	RADIUS
D.F.	DOUGLAS FIR	RCPT.	RECEPTACLE
DIA.	DIAMETER	REF.	REFERENCE
DIAG.	DIAGONAL	REINF.	REINFORCEMENT(ING)
DIM.	DIMENSION	REQ'D.	REQUIRED
DWG.	DRAWING(S)	RGS.	RIGID GALVANIZED STEEL
DWL.	DOWEL(S)	SAF	SAFETY
EA.	EACH	SCH.	SCHEDULE
EGR.	EMERGENCY GENERATOR RECEPTACLE	SDBC	SOFT DRAWN BARE COPPER
EL.	ELEVATION	SEC	SECONDARY
ELEC.	ELECTRICAL	SHT.	SHEET
ELEV.	ELEVATOR	SIM.	SIMILAR
EMT.	ELECTRICAL METALLIC TUBING	S.N.	SOLID NEUTRAL
E.N.	EDGE NAIL	SPEC.	SPECIFICATION(S)
ENCL.	ENCLOSURE	SQ.	SQUARE
ENG.	ENGINEER	S.S.	STAINLESS STEEL
EQ.	EQUAL	STD.	STANDARD
EXST.(E)	EXISTING	STL.	STEEL
EXP.	EXPANSION	STRUC.	STRUCTURAL
EXT.	EXTERIOR	SURF	SURFACE
FAB.	FABRICATION(OR)	SW	SWITCH
FAC.	FACTOR	TEL.	TELEPHONE
F/A	FIRE ALARM	TEMP.	TEMPORARY
F.F.	FINISH FLOOR	THK.	THICK(NESS)
F.G.	FINISH GRADE	T.N.	TOE NAIL
FIN.	FINISH(ED)	T.O.A.	TOP OF ANTENNA
FLR.	FLOOR	T.O.C.	TOP OF CURB
FLUOR	FLUORESCENT	T.O.F.	TOP OF FOUNDATION
FDN.	FOUNDATION	T.O.P.	TOP OF PLATE (PARAPET)
F.O.C.	FACE OF CONCRETE	T.O.S.	TOP OF STEEL
F.O.M.	FACE OF MASONRY	T.O.W.	TOP OF WALL
F.O.S.	FACE OF STUD	TYP.	TYPICAL
F.O.W.	FACE OF WALL	U.G.	UNDER GROUND
F.S.	FINISH SURFACE	U.L.	UNDERWRITERS LABORATORY INC.
FT.(')	FOOT (FEET)	U.N.O.	UNLESS NOTED OTHERWISE
FTG.	FOOTING	V	VOLT
FU	FUSE	VAC	VOLT ALTERNATING CURRENT
G	GROUND	V.I.F.	VERIFY IN FIELD
GR	GROWTH (CABINET)	W	WATT OR WIRE
GA.	GAUGE	WD	WIDE(WIDTH)
GEN.	GENERATOR	W/	WITH
GI.	GALVANIZE(D)	W/O	WITHOUT
G.F.C. I.	GROUND FAULT CIRCUIT INTERRUPTER	WD.	WOOD
GLB.	GLUE LAMINATED BEAM	W.P.	WEATHERPROOF
GND	GROUND	WT.	WEIGHT
GPS	GLOBAL POSITIONING SYSTEM	XFER	TRANSFER
GRND.	GROUND	XFMR	TRANSFORMER
HDBC	HARD DRAWN COPPER WIRE	XLPE	CROSS-LINK POLYETHYLENE
HDR.	HEADER	℄	CENTERLINE
HGR.	HANGER	℘	PLATE, PROPERTY LINE
HPS	HIGH PRESSURE SODIUM		

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REGISTERED PROFESSIONAL ENGINEER
BRET A. McCOMB
C 69891
EXP 09-30-16
CIVIL
STATE OF CALIFORNIA

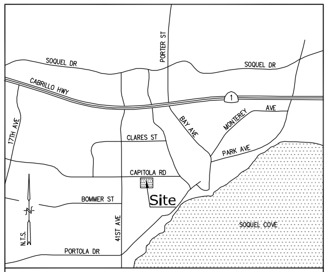
CAPITOLA MALL SC2

4400 CAPITOLA RD
CAPITOLA, CA 95010

ISSUE STATUS

△	DATE	DESCRIPTION
	04/09/15	ZD 90%
	07/11/15	ZD 100%

DRAWN BY: G. WATKINS
CHECKED BY: T. LAWRENCE / M. WEISS
APPROVED BY: B. McCOMB
DATE: 07/11/15
SHEET TITLE:
GENERAL NOTES, LEGEND, & ABBREVIATIONS
SHEET NUMBER
T-2



Vicinity Map

Easements

- ● EASEMENT AGREEMENT BY CAPITOLA OFFICE PLAZA, LTD., A CALIFORNIA LIMITED PARTNERSHIP TO LLOYD J. MANSON, DATED 3/5/1984 RECORDED 9/17/1984 IN BOOK 3756 PAGE 653 IN INSTRUMENT NO. 44570. (**PLOTTED HEREON**)
- ● GRANT OF EASEMENT BY REDWOOD RETREAT COMPANY, A GENERAL PARTNERSHIP TO PACIFIC BELL, A CORPORATION, DATED 11/15/1985 RECORDED 11/27/1985 IN BOOK 3913 PAGE 845 IN INSTRUMENT NO. 060395. (**PLOTTED HEREON**)
- ● EASEMENT BY REDWOOD RETREAT INVESTMENT COMPANY, A PARTNERSHIP TO PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION, DATED 2/12/1986 RECORDED 2/25/1986 IN BOOK 3946 PAGE 370 IN INSTRUMENT NO. 009988. (**PLOTTED HEREON**)
- ● SATISFACTION OF EASEMENT AGREEMENT, DATED 3/8/1987 RECORDED 3/16/1987 IN BOOK 4127 PAGE 366 IN INSTRUMENT NO. 016893. (**PLOTTED HEREON**)

18. GRANT OF PARKING EASEMENT BY REDWOOD RETREAT INVESTMENT COMPANY, A CALIFORNIA GENERAL PARTNERSHIP TO CALIFORNIA STATE AUTOMOBILE ASSOCIATION, A CALIFORNIA CORPORATION, DATED 11/27/1989 RECORDED 7/10/1990 IN BOOK 4700 PAGE 422 IN INSTRUMENT NO. 45257. (BLANKET IN NATURE OVER EXISTING PARKING LOT)

Title Report

PREPARED BY: U.S. TITLE SOLUTIONS
ORDER NO.: 51377-CA-1505-5010
DATED: MAY 21, 2015

Legal Description

PARCEL A AS THE SAME IS SHOWN UPON THAT CERTAIN PARCEL MAP FILED FOR RECORD JANUARY 31, 1990 IN VOLUME 50 OF PARCEL MAPS, PAGE 59, SANTA CRUZ COUNTY RECORDS.

Assessor's Parcel No.

034-111-53

Access Easement/Lease Area

TO BE DETERMINED

Geographic Coordinates at Center of Proposed Sectors

1983 DATUM: LATITUDE 36° 58' 24.31"N LONGITUDE 121° 57' 39.00"W
ELEVATION = 81.8 FEET ABOVE MEAN SEA LEVEL

CERTIFICATION:
THE LATITUDE AND LONGITUDE SHOWN ABOVE ARE ACCURATE TO WITHIN +/- 15 FEET HORIZONTALLY AND THAT THE ELEVATIONS SHOWN ABOVE ARE ACCURATE TO WITHIN +/- 3 FEET VERTICALLY. THE HORIZONTAL DATUM (GEOGRAPHIC COORDINATES) IS IN TERMS OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83) AND IS EXPRESSED IN DEGREES (°), MINUTES (') AND SECONDS ("), TO THE NEAREST HUNDREDTH OF A SECOND. THE VERTICAL DATUM (ELEVATIONS) IS IN TERMS OF THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND IS DETERMINED TO THE NEAREST TENTH OF A FOOT.

Basis of Bearings

THE STATE PLANE COORDINATE SYSTEM OF 1983 (NAD 83), CALIFORNIA ZONE 3.

Bench Mark

THE CALIFORNIA SPATIAL REFERENCE CENTER C.O.R.S "P212", ELEVATION = 230.71 FEET (NAVD 88).

Date of Survey

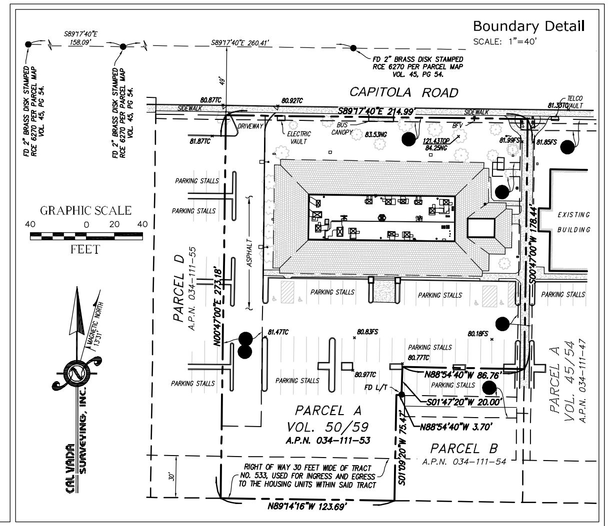
MARCH 26, 2015

Legend

	AC-UNIT	NG	NATURAL GROUND
BFV	BACKFLOW VALVE	PL	PROPERTY LINE
	BLOCK WALL	PIV	POST INDICATOR VALVE
CL	CENTER LINE	OT	OVERHANG TOP
	CONCRETE PAVEMENT	R	ROOF
FS	FINISH SURFACE		ROOF DRAIN
	FIRE DEPARTMENT CONNECTION	TC	TOP OF CURB
	FIRE HYDRANT	TP	TOP OF PARAPET
	FLAG POLE	TOP	TOP OF STRUCTURE
	FOUND MONUMENT		TREE
	HANDICAP		VENT
ICV	IRRIGATE CONTROL VALVE		WATER FAUCET
	LATITUDE-LONGITUDE COORDINATE		WATER METER
	LIGHT		WHIP ANTENNA

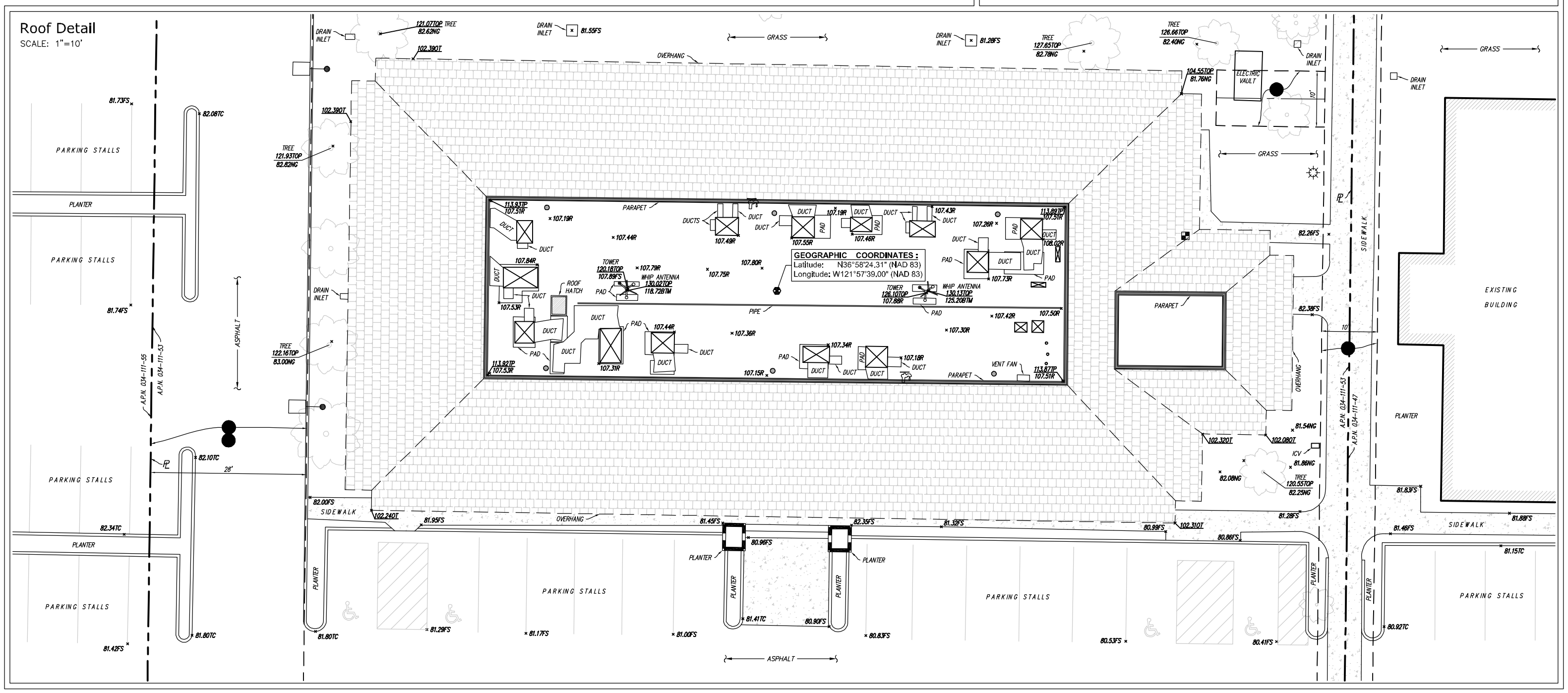
Boundary Detail

SCALE: 1"=40'



Roof Detail

SCALE: 1"=10'



verizon wireless

PLANS PREPARED BY:

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JOB NO. 15168

CONSULTING GROUP:

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Phone: (530) 823-6546 www.pdnd.com
11768 Atwood Rd, Suite 20 Auburn, CA 95603

NO.	DATE:	DESCRIPTION:	BY:
	4/4/15	SUBMITTAL	AV
1	1/21/16	TITLE REPORT	DG
2	3/30/16	CLIENT COMMENTS	RG

SITE INFORMATION:

CAPITOLA MALL SC2

4400 CAPITOLA ROAD,
CAPITOLA, CA 95010
SANTA CRUZ COUNTY

SEAL:

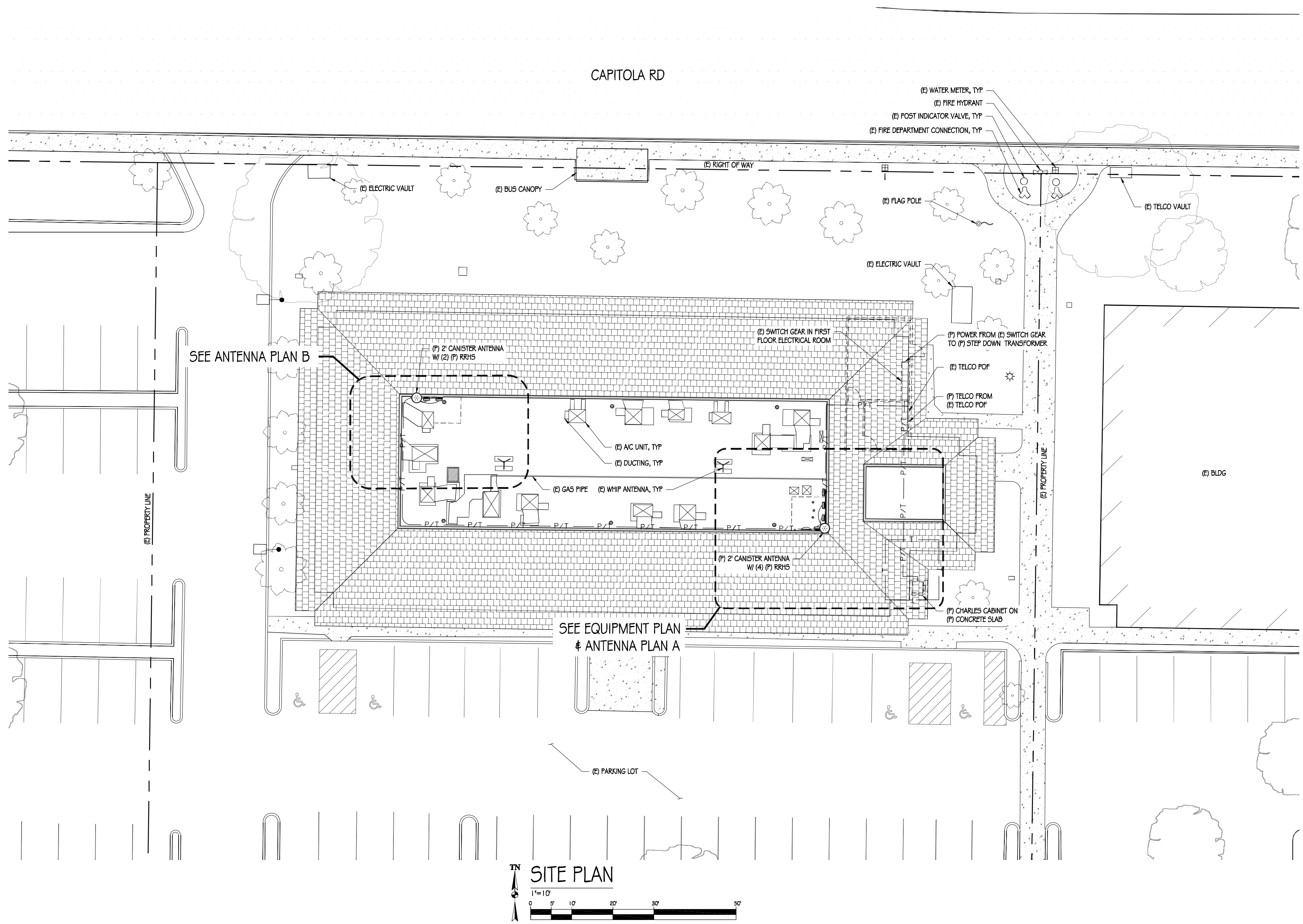
SHEET TITLE:

TOPOGRAPHIC SURVEY

SHEET NUMBER: C1

REV: 2

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)



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DRAWN BY: G. WATKINS
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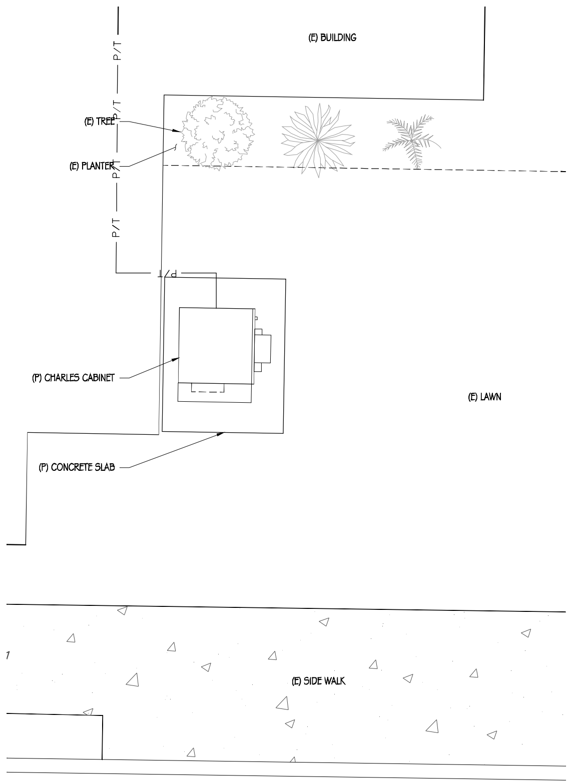
APPROVED BY: B. McCOMB
DATE: 07/11/15

SHEET TITLE:
SITE PLAN

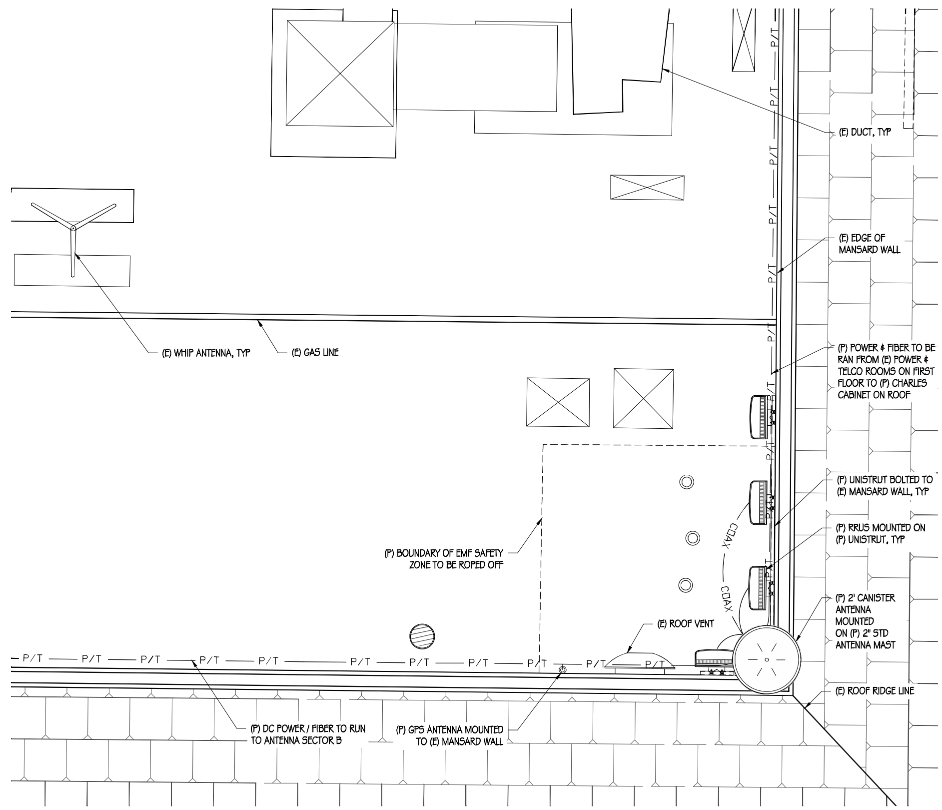
SHEET NUMBER
A-1

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)



EQUIPMENT PLAN

1/2"=1'



ANTENNA PLAN A

1/2"=1'

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VERIZON WIRELESS
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EXP 09-30-16
CIVIL
STATE OF CALIFORNIA

CAPITOLA MALL SC2

4400 CAPITOLA RD
CAPITOLA, CA 95010

ISSUE STATUS

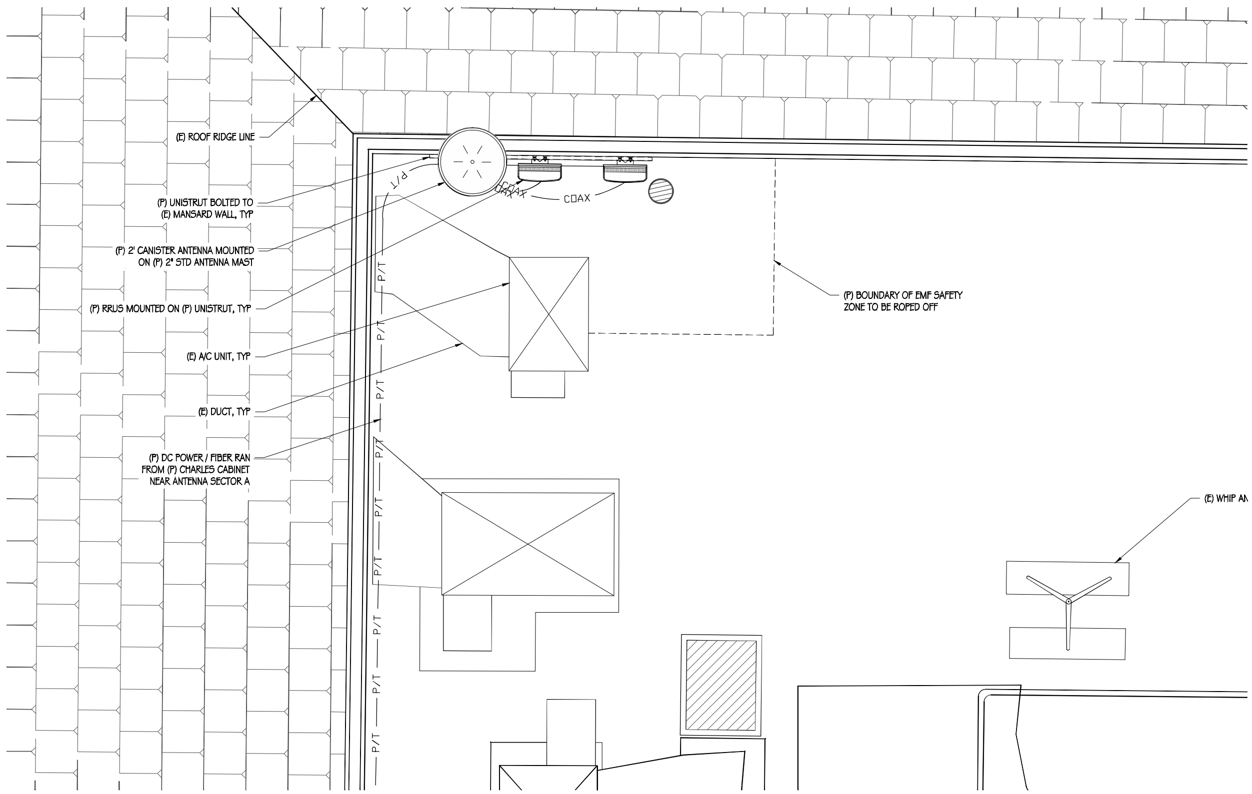
△	DATE	DESCRIPTION
	04/09/15	ZD 90%
	07/11/15	ZD 100%

DRAWN BY: G. WATKINS
CHECKED BY: T. LAWRENCE / M. WEISS
APPROVED BY: B. McCOMB
DATE: 07/11/15

SHEET TITLE:
EQUIPMENT PLAN & ANTENNA PLAN A

SHEET NUMBER
A-2

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)



TN

ANTENNA PLAN B

1/2"=1'

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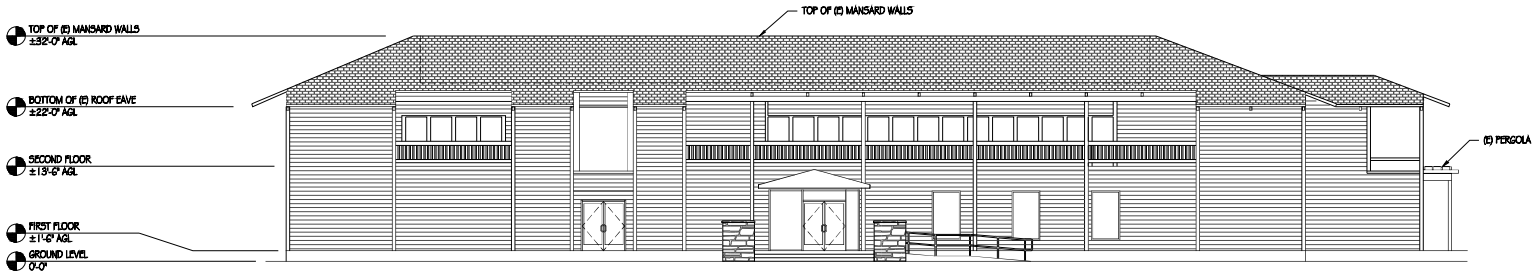
SHEET TITLE:
ANTENNA PLAN B

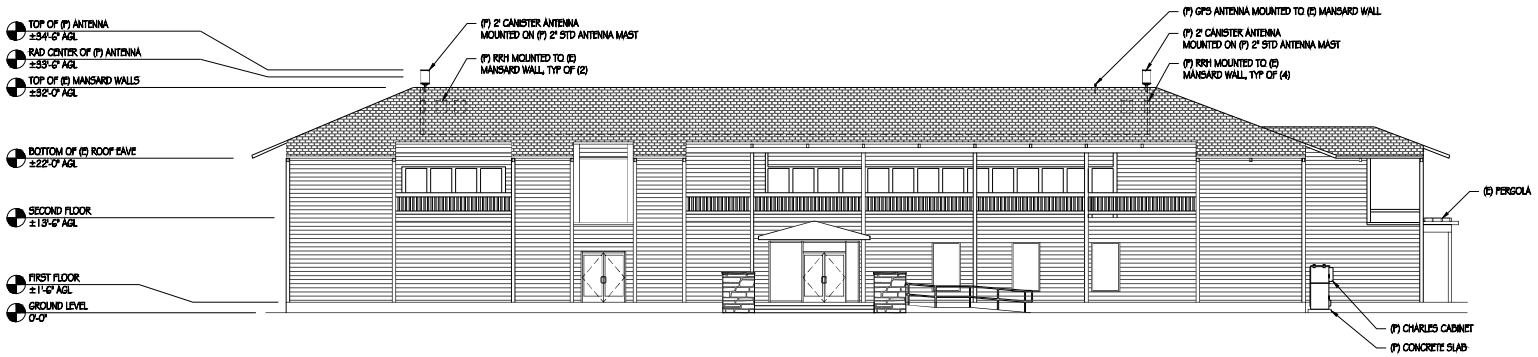
SHEET NUMBER
A-3

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)



EXISTING SOUTH ELEVATION

1/8"=1'-0"



NEW SOUTH ELEVATION

1/8"=1'-0"

NOTE: ALL EQUIPMENT TO BE PAINTED TO MATCH (E) BUILDING

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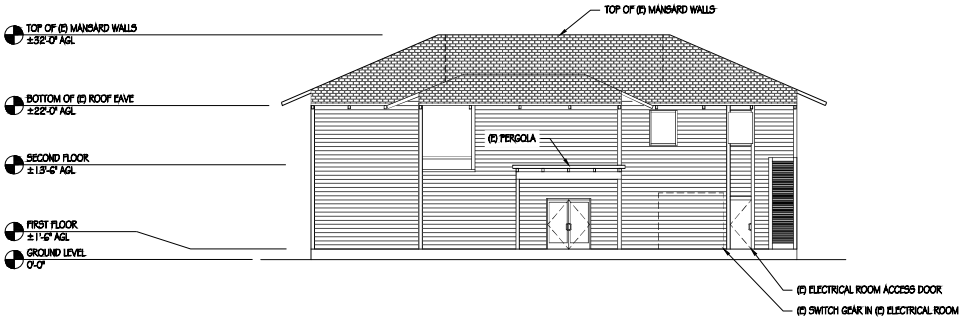
SHEET TITLE:

ELEVATIONS

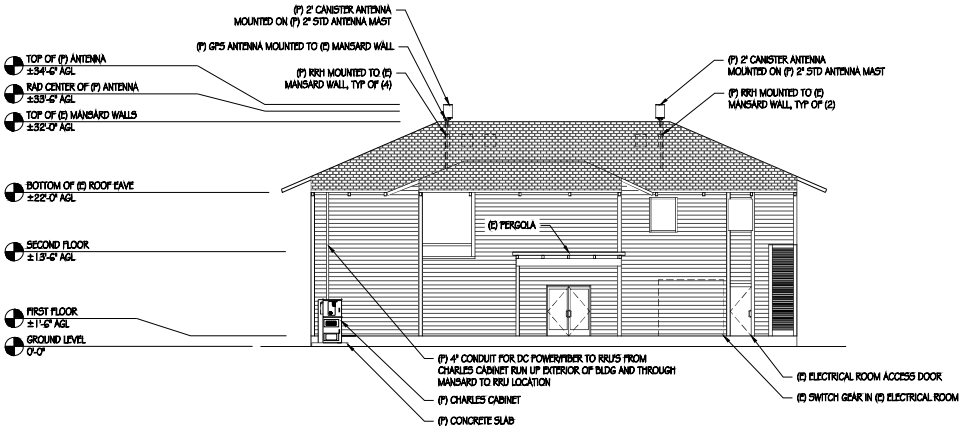
SHEET NUMBER

A-4



EXISTING EAST ELEVATION

1/8"=1'-0"



NEW EAST ELEVATION

1/8"=1'-0"

NOTE: ALL EQUIPMENT TO BE PAINTED TO MATCH (E) BUILDING

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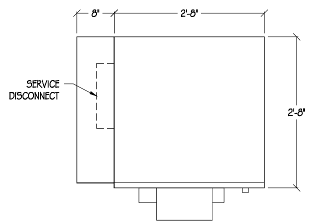
SHEET TITLE:

ELEVATIONS

SHEET NUMBER

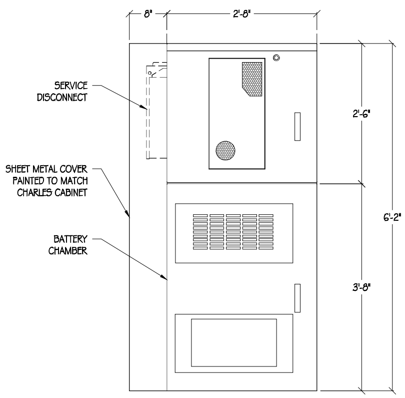
A-5



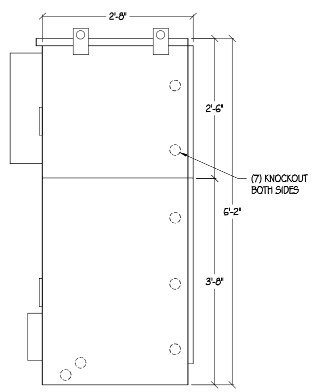
PLAN VIEW

CHARLES UNIVERSAL BROADBAND ENCLOSURE (CUBE) - SS4C215DB3

TOTAL WEIGHT:	740 LBS (EMPTY), 1811 LBS (W/ BATTERIES)
DIMENSIONS:	73X32X32" (W/ OUT COVER)
EQUIP CHAMBER:	30X32X32"
BATT CHAMBER:	44X32X32"
THERMAL SPECS:	750W 48VDC HX
POWER:	GE INFINITY S, 48V, 200A NE548-23-AC1-PS4-DC1E



FRONT VIEW

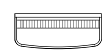


SIDE VIEW W/ OUT COVER

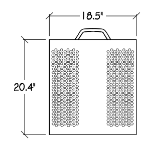
1 CABINET DETAIL
1"=1'

ERICSSON RRUS-12

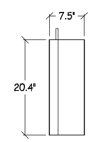
COLOR:	GREY
TOTAL WEIGHT:	+/- 58 LB
DIMENSIONS:	20.4" TALL X 18.5" WIDE X7.5" DEEP



TOP VIEW



FRONT VIEW

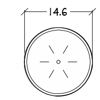


SIDE VIEW

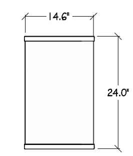
2 RRUS-12 DETAIL
1"=1'

AMPHENOL 696-960 / 1710-2170 MHZ

WIND AREA	2.40 SQ FT
WEIGHT	25 LBS
DIMENSIONS:	Ø14.6" X 24" TALL
CONNECTOR:	12 PORTS / MINI DIN / FEMALE / BOTTOM



TOP VIEW



FRONT VIEW

3 ANTENNA DETAIL
½"=1'

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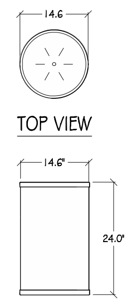
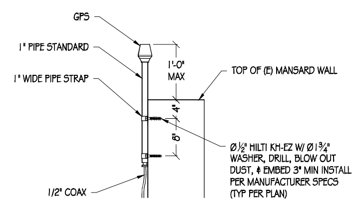
DETAILS
SHEET NUMBER
A-6

AMPHENOL 696-960 / 1710-2170 MHZ

WIND AREA	2.40 SQ FT
WEIGHT	25 LBS
DIMENSIONS:	Ø14.6" X 24" TALL
CONNECTOR:	12 PORTS / MINI DIN / FEMALE / BOTTOM



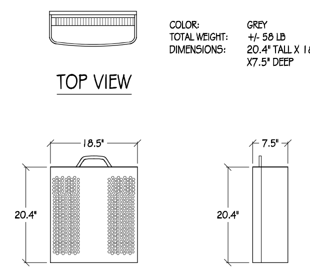
1 ANTENNA DETAIL
½"=1'



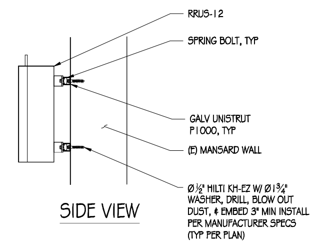
2 GPS ANTENNA DETAIL
1"=1'

ERICSSON RRUS-12

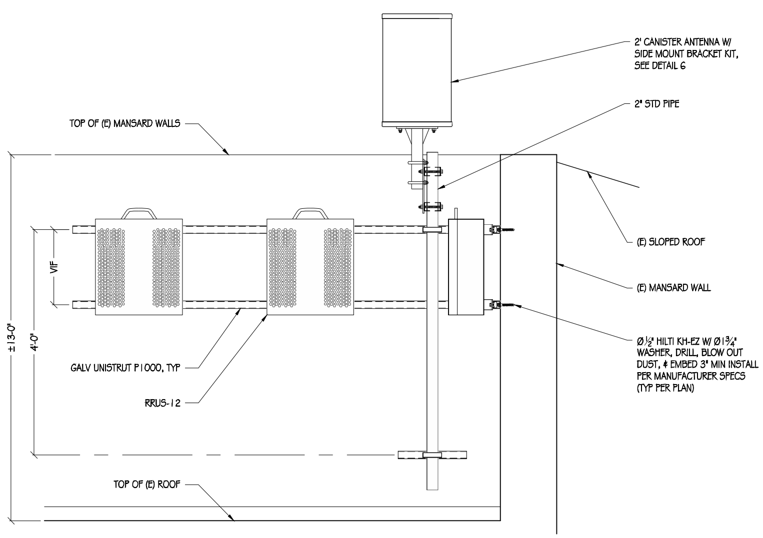
COLOR:	GREY
TOTAL WEIGHT:	+/- 58 LB
DIMENSIONS:	20.4" TALL X 18.5" WIDE X7.5" DEEP



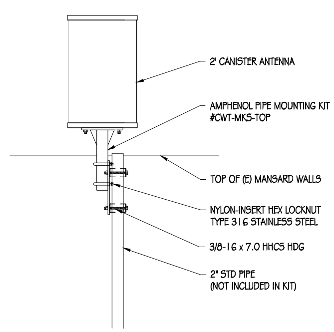
3 RRUS-12 DETAIL
1"=1'



4 RRUS MOUNTING DETAIL
1"=1'



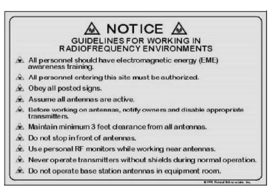
5 UNISTRUT MOUNTING DETAIL
1"=1'-0"



6 CANISTER MOUNTING DETAIL
1"=1'-0"

NOTES:

1. NEW VINYL SIGN TO BE PROVIDED BY VERIZON WIRELESS AND ATTACHED 3' BELOW EXISTING ANTENNAS. SIGN TO BE YELLOW



7 NOTICE SIGNAGE
1"=1'

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DATE:	07/11/15

SHEET TITLE:
DETAILS

SHEET NUMBER
A-7

1. GENERAL REQUIREMENTS

A. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL ELECTRIC CODE AND ALL STATE AND LOCAL CODES. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THE MOST STRINGENT OF THESE CODES. SHOULD CHANGES BE NECESSARY IN THE DRAWINGS OR SPECIFICATIONS TO MAKE THE WORK COMPLY WITH THESE REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING AND CEASE WORK ON PARTS OF THE CONTRACT WHICH ARE AFFECTED.

B. THE CONTRACTOR SHALL MAKE A SITE VISIT PRIOR TO BIDDING AND CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES. THE CONTRACTOR ASSUMES ALL LIABILITY FOR FAILURE TO COMPLY WITH THIS PROVISION.

C. THE EXTENT OF THE WORK IS INDICATED BY THE DRAWINGS, SCHEDULES, AND SPECIFICATIONS AND IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT. THE WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIPMENT, MATERIALS AND SUPPLIES NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. THE WORK SHALL ALSO INCLUDE THE COMPLETION OF ALL ELECTRICAL WORK NOT MENTIONED OR SHOWN WHICH ARE NECESSARY FOR SUCCESSFUL OPERATION OF ALL SYSTEMS.

D. THE CONTRACTOR SHALL PREPARE A BID FOR A COMPLETE AND OPERATIONAL SYSTEM, WHICH INCLUDES THE COST FOR MATERIAL AND LABOR.

E. WORKMANSHIP AND NEAT APPEARANCE SHALL BE AS IMPORTANT AS THE OPERATION. DEFECTIVE OR DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE IN A MANNER ACCEPTABLE TO OWNER AND ARCHITECT/ENGINEER.

F. COMPLETE THE ENTIRE INSTALLATION AS SOON AS THE PROGRESS OF THE WORK WILL PERMIT. ARRANGE ANY OUTAGE OF SERVICE WITH THE OWNER AND BUILDING MANAGER IN ADVANCE. MINIMIZE DOWNTIME ON THE BUILDING ELECTRICAL SYSTEM.

G. THE ENTIRE ELECTRICAL SYSTEM INSTALLED UNDER THIS CONTRACT SHALL BE DELIVERED IN PROPER WORKING ORDER. REPLACE, WITHOUT ADDITIONAL COST TO THE OWNER, ANY DEFECTIVE MATERIAL AND EQUIPMENT WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.

H. ANY ERROR, OMISSION OR DESIGN DISCREPANCY ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION OR CORRECTION BEFORE CONSTRUCTION.

I. "PROVIDE": INDICATES THAT ALL ITEMS ARE TO BE FURNISHED, INSTALLED AND CONNECTED IN PLACE.

J. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES.

2. EQUIPMENT LOCATION

A. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE DESIRED LOCATIONS OR ARRANGEMENTS OF CONDUIT RUNS, OUTLETS, EQUIPMENT, ETC., AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. PROPER JUDGMENT MUST BE EXERCISED IN EXECUTING THE WORK SO AS TO SECURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE SPACE AND TO OVERCOME LOCAL DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE OF STRUCTURE CONDITIONS ENCOUNTERED.

B. IN THE EVENT CHANGES IN THE INDICATED LOCATIONS OR ARRANGEMENTS ARE NECESSARY, DUE TO FIELD CONDITIONS IN THE BUILDING CONSTRUCTION OR REARRANGEMENT OF FURNISHINGS OR EQUIPMENT, SUCH CHANGES SHALL BE MADE WITHOUT COST, PROVIDING THE CHANGE IS ORDERED BEFORE THE CONDUIT RUNS, ETC., AND WORK DIRECTLY CONNECTED TO THE SAME IS INSTALLED AND NO EXTRA MATERIALS ARE REQUIRED.

C. LIGHTING FIXTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. COORDINATE THE FIXTURE LOCATION WITH MECHANICAL EQUIPMENT TO AVOID INTERFERENCE.

D. COORDINATE THE WORK OF THIS SECTION WITH THAT OF ALL OTHER TRADES. WHERE CONFLICTS OCCUR, CONSULT WITH THE RESPECTIVE CONTRACTOR AND COME TO AGREEMENT AS TO CHANGES NECESSARY. OBTAIN WRITTEN ACCEPTANCE FROM ARCHITECT/ENGINEER FOR THE PROPOSED CHANGES BEFORE PROCEEDING.

3. SHOP DRAWINGS

A. SUBMIT SIX (6) COPIES OF SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL WITHIN 35 DAYS OF AWARD OF CONTRACT, SHOP DRAWINGS SHALL BE SUBMITTED IN A COMPLETE BOUND MANUAL INCLUDING LIGHT FIXTURES, SERVICE METERING, TRANSFER SWITCH, PANELBOARD, AND DISCONNECT SWITCHES. THE CONTRACTOR SHALL VERIFY DIMENSIONS OF EQUIPMENT TO INSURE THAT THEY FIT IN THE DESIGNATED AREA AND COMPLY WITH REQUIREMENTS OF ALL APPLICABLE CODES FOR REQUIRED WORKING CLEARANCES ABOUT ELECTRICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL. DEPARTURE FROM THE ABOVE WILL RESULT IN RE-SUBMITTAL AND DELAYS.

4. SUBSTITUTIONS

A. NO SUBSTITUTIONS ARE ALLOWED

5. TESTS

A. BEFORE FINAL ACCEPTANCE OF WORK, THE CONTRACTOR SHALL INSURE THAT ALL EQUIPMENT, SYSTEMS, FIXTURES, ETC., ARE WORKING SATISFACTORILY AND TO THE INTENT OF THE DRAWINGS.

6. PERMITS

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING OUT AND PAYING FOR ALL THE REQUIRED PERMITS, INSPECTION AND EXAMINATION WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

7. GROUNDING

A. THE CONTRACTOR SHALL PROVIDE A COMPLETE, AND APPROVED GROUNDING SYSTEM INCLUDING ELECTRODES. ELECTRODE CONDUCTOR, BONDING CONDUCTORS, AND EQUIPMENT CONDUCTORS AS REQUIRED BY ARTICLE 250 OF NATIONAL ELECTRICAL CODE.

B. CONDUITS CONNECTED TO EQUIPMENT AND DEVICES BE METALLICALLY JOINED TOGETHER TO PROVIDE SHALL EFFECTIVE ELECTRICAL CONTINUITY.

C. FEEDERS AND BRANCH CIRCUIT WIRING INSTALLED IN A NONMETALLIC CONDUIT SHALL INCLUDE A CODE SIZED GROUNDING CONDUCTOR HAVING GREEN INSULATION. THE GROUND CONDUCTOR SHALL BE PROPERLY CONNECTED AT BOTH ENDS TO MAINTAIN ELECTRICAL CONTINUITY.

D. REFER TO GROUND BUSS DETAILS. PROVIDE NEW SYSTEM COMPLETE WITH CONDUCTORS, GROUND GROUND ROD AND DESCRIBED TERMINATIONS.

E. ALL GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED #2 UNLESS NOTED OTHERWISE.

F. ALL NON-DIRECT BURIED TELEPHONE EQUIPMENT CONDUCTORS SHALL BE #2 STRANDED, GROUND THHN (GREEN) INSULATION.

G. ALL GROUND CONNECTIONS SHALL BE MADE WITH "HYGROUND" COMPRESSION SYSTEM BURNDY CONNECTORS EXCEPT WHERE NOTED OTHERWISE.

H. PAINT AT ALL GROUND CONNECTIONS SHALL BE REMOVED.

I. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FUTURE INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS AND FURNISH TO SMART SMR ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".

8. UTILITY SERVICE

A. TELEPHONE AND ELECTRICAL METERING FACILITIES SHALL CONFORM TO THE REQUIREMENTS OF THE SERVING UTILITY COMPANIES. CONTRACTOR SHALL VERIFY SERVICE LOCATIONS AND REQUIREMENTS. SERVICE INFORMATION WILL BE FURNISHED BY THE SERVING UTILITIES.

B. CONFORM TO ALL REQUIREMENTS OF THE SERVING UTILITY COMPANIES.

9. PRODUCTS

A. ALL MATERIALS SHALL BE NEW, CONFORMING WITH THE NC, ANSI, NEMA, AND THEY SHALL BE U.L. LISTED AND LABELED.

B. CONDUIT:

B.A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR, RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO.

B.B. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.

B.C. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. SEAL TIGHT FLEXIBLE CONDUIT.

B.D. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILING OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.

B.E. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.

B.F. ALL CONDUIT ONLY (C.O.) SHALL HAVE PULL ROPE.

B.G. CONDUITS RUN ON ROOFS SHALL BE INSTALLED ON 4 X 4 RED CHAINLINK SLEEPERS, 6'-0" ON CENTER, SET IN NON-HARDENING MASTIC.

C. ALL WIRE AND CABLE SHALL BE COPPER, 600 VOLT, #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. TYPE THHN INSULATION USED UNLESS CONDUCTORS INSTALLED IN CONDUIT EXPOSED TO WEATHER, IN WHICH CASE TYPE THWN INSULATION SHALL BE USED.

D. PROVIDE GALVANIZED COATED STEEL BOXES AND ACCESSORIES SIZED PER CODE TO ACCOMMODATE ALL DEVICES AND WIRING.

E. DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH WHITE FINISH (UNLESS NOTED BY ARCHITECT/ENGINEER), 20 AMP, 125 VOLT, THREE WIRE GROUNDING TYPE, NEMA 5-20R. MOUNT RECEPTACLE AT+12" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED ON DRAWINGS OR IN DETAILS. WEATHERPROOF RECEPTACLES SHALL BE GROUND FAULT INTERRUPTER TYPE WITH SIERRA #WPD-8 LIFT COVERPLATES.

F. TOGGLE SWITCHES SHALL BE 20 AMP, 120 VOLT AC, SPECIFICATION GRADE WHITE (UNLESS NOTED OTHERWISE) FINISH. MOUNT SWITCHES AT +48" ABOVE FINISHED FLOOR.

G. PANELBOARDS SHALL BE DEAD FRONT SAFETY TYPE WITH ANTI-BURN SOLDERLESS COMPRESSION APPROVED FOR COPPER CONDUCTORS, COPPER BUSS BARS, FULL SIZED NEUTRAL BUSS, GROUND BUSS AND EQUIPPED WITH QUICK-MAKE QUICK-BREAK BOLT-IN TYPE THERMAL MAGNETIC CIRCUIT BREAKERS. MOUNT TOP OF THE PANELBOARDS AT 6'-3" ABOVE FINISHED FLOOR. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORY.

H. ALL CIRCUIT BREAKERS, MAGNETIC STARTERS AND OTHER ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED.

I. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG. COPPERWELD OR APPROVED EQUAL.

10. INSTALLATION

A. PROVIDE SUPPORTING DEVICES FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, BOXES, PANEL, ETC., SUPPORT LUMINARIES FROM UNDERSIDE OF STRUCTURAL CEILING, EQUIPMENT SHALL BE BRACED TO WITHSTAND HORIZONTAL FORCES IN ACCORDANCE WITH STATE AND LOCAL CODE REQUIREMENTS. PROVIDE PRIOR ALIGNMENT AND LEVELING OF ALL DEVICES AND FIXTURES.

B. CUTTING, PATCHING, CHASES, OPENINGS: PROVIDE LAYOUT IN ADVANCE TO ELIMINATE UNNECESSARY CUTTING OR DRILLING OF WALLS, FLOORS CEILINGS, AND ROOFS. ANY DAMAGE TO BUILDING STRUCTURE OR EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR. OBTAIN PERMISSION FROM THE ARCHITECT/ENGINEER BEFORE CORING.

C. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.

D. LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.

E. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH THE REQUIREMENTS OF THE C.B.C.

11. PROJECT CLOSEOUT

A. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.

B. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.

C. ALL BROCHURES, OPERATING MANUALS, CATALOG, SHOP DRAWINGS, ETC., SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

1. SERVICE POWER SHALL BE 100A,1Ø, 3W. 120/208 OR 120/240V.
2. UTILITY RECEPTACLE IS A GFCI DUPLEX OUTLET INSTALLED IN THE DEADFRONT OF PPC.
3. PROVIDE A MIN. 36" WORK CLEARANCE IN FRONT OF PANELS/SERVICE EQUIP.
4. ALL BREAKERS IN THE ELEC. PANEL ARE RATED 10,000 RMS SYMMETRICAL AMPS, 240V MAX. 75° C.
5. ALL WIRING SHALL BE COPPER 75° C U.N.O.
6. CONDUIT REQUIREMENTS (TYP., U.N.O.): UNDERGROUND: PVC (SCHED 40 OR 80) INDOOR: EMT (RGS IN TRAFFIC AREAS) OUTDOOR (ABOVE GRADE): RGS.
7. APPLETON EMERGENCY GENERATOR PLUG AT 36" A.F.F. CONTRACTOR TO VERIFY EXACT LOCATION WITH LANDLORD AND UTILITY COORDINATOR.
8. PLACE "TRUE TAPE" AND PULL ROPE IN THE CONDUITS AS REQUIRED.

A	AMPERE	ELEC	ELECTRICAL	MIN	MINIMUM	SDBC	SOFT DRAWN BARE COPPER
ACCA	ANTENNA CABLE COVER ASSEMBLY	EMT	ELECTRICAL METALLIC TUBING	MLO	MAIN LUGS ONLY	SEC	SECONDARY
		ENCL	ENCLOSURE	MTD	MOUNTED	S.N.	SOLID NEUTRAL
A/C	AMPERE INTERRUPTING CAPACITY	EXIST	EXISTING	MTG	MOUNTING	SURF	SURFACE
		FAC	FACTOR	MTS	MANUAL TRANSFER SWITCH	SW	SWITCH
APPROX	APPROXIMATELY	F/A	FIRE ALARM	N	NEUTRAL	TEL	TELEPHONE
AT	AMPERE TRIP	FLUOR	FLUORESCENT	(P)	NEW	TYP	TYPICAL
AWG	AMERICAN WIRE GAGE	FT	FOOT/FEET	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.	U/G	UNDERGROUND
BATT	BATTERY	FU	FUSE			U.L.	UNDERWRITER'S LABORATORY INC.
BD	BOARD	G	GROUND	OH	OVERHEAD		
BR	BRANCH	GEN	GENERATOR	P	POLE	U.N.O.	UNLESS NOTED OTHERWISE
BRKR	BREAKER	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	PCS	PERSONAL COMMUNICATION SYSTEM	V	VOLT
BTCW	BARE TINNED COPPER WIRE	GND	GROUNDING			VAC	VOLT ALTERNATING CURRENT
BTS	BASE TRANSMISSION SYSTEM	GPS	GLOBAL POSITIONING SYSTEM	PH	PHASE	W	WATT OR WIRE
C	CONDUIT	GR	GROWTH	PNLBD	PANELBOARD	W/	WITH
CAB	CABINET	HDBC	HARD DRAWN COPPER WIRE	PPC	POWER PROTECTION CABINET	W/O	WITHOUT
CB	CIRCUIT BREAKER	HPS	HIGH PRESSURE SODIUM	PRC	PRIMARY RADIO CABINET	XFER	TRANSFER
CKT	CIRCUIT	LG	LENGTH	PRI	PRIMARY	XFMR	TRANSFORMER
CONT	CONTINUOUS	LPS	LOW PRESSURE SODIUM	PWR	POWER	XLPE	CROSS-LINK POLYETHYLENE
DEM	DEMAND	MAX	MAXIMUM	RCPT	RECEPTACLE		
(E)	EXISTING	MECH	MECHANICAL	RGS	RIGID GALVANIZED STEEL		
EGR	EMERGENCY GEN. RECEPTACLE	MFR	MANUFACTURER	SAF	SAFETY		

OHT/OHP	OVERHEAD TELEPHONE/OVERHEAD POWER		LIGHTING FIXTURE, 1/175W. METAL HALIDE, HUBBELL CAT #MIC-0175H-336
OHT	OVERHEAD TELEPHONE LINE		5/8" X 10'-0" ,CU. GND ROD 18" MIN. BELOW GRADE.
OHP	OVERHEAD POWER LINE		5/8" X 10'-0" ,CU. GND ROD IN TEST WELL 18" MIN. BELOW GRADE.
E	POWER RUN		CHEMICAL GROUND ROD (XIT GROUND ROD)
T	TELCO RUN		CADWELD CONNECTION
T/E	POWER/TELCO RUN		MECHANICAL CONNECTION
G	GROUNDING CONDUCTOR		HALO GROUND CONNECTION
	GROUNDING CONDUCTOR		CIRCUIT BREAKER
	CONDUIT UNDERGROUND	M	UTILITY METER BASE
	FUSE, SIZE AND TYPE AS INDICATED.		TRANSFORMER
	SAFETY SWITCH, 2P-240V-60A W/60A FUSES, NEMA 3R ENCLOSURE, SQ D CATALOG NO. H222NRB	T	STEPDOWN TRANSFORMER
	MANUAL TRANSFER SWITCH, 2P-240V-200A, NO FUSE, NEMA 3R ENCLOSURE		RECEPTACLE, 2P-3W-125V-15A, DUPLEX, GROUND TYPE, HUBBELL CATALOG #5362
	LIGHTING FIXTURE, HALOGEN, QUARTZ, 1/300W, HUBBELL LIGHTING CATALOG #QL-505	S	TOGGLE SWITCH, 1P-125V-15A, HUBBELL CATALOG #HBL 1201CN
		S_{WP}	TOGGLE SWITCH, 1P-120V-15A, "WP"
		S	IONIZATION SMOKE DETECTOR W/ALARM HORN & AUXILIARY CONTACT, 120 VAC, GENTEX PART NO. 7100F
			POLE

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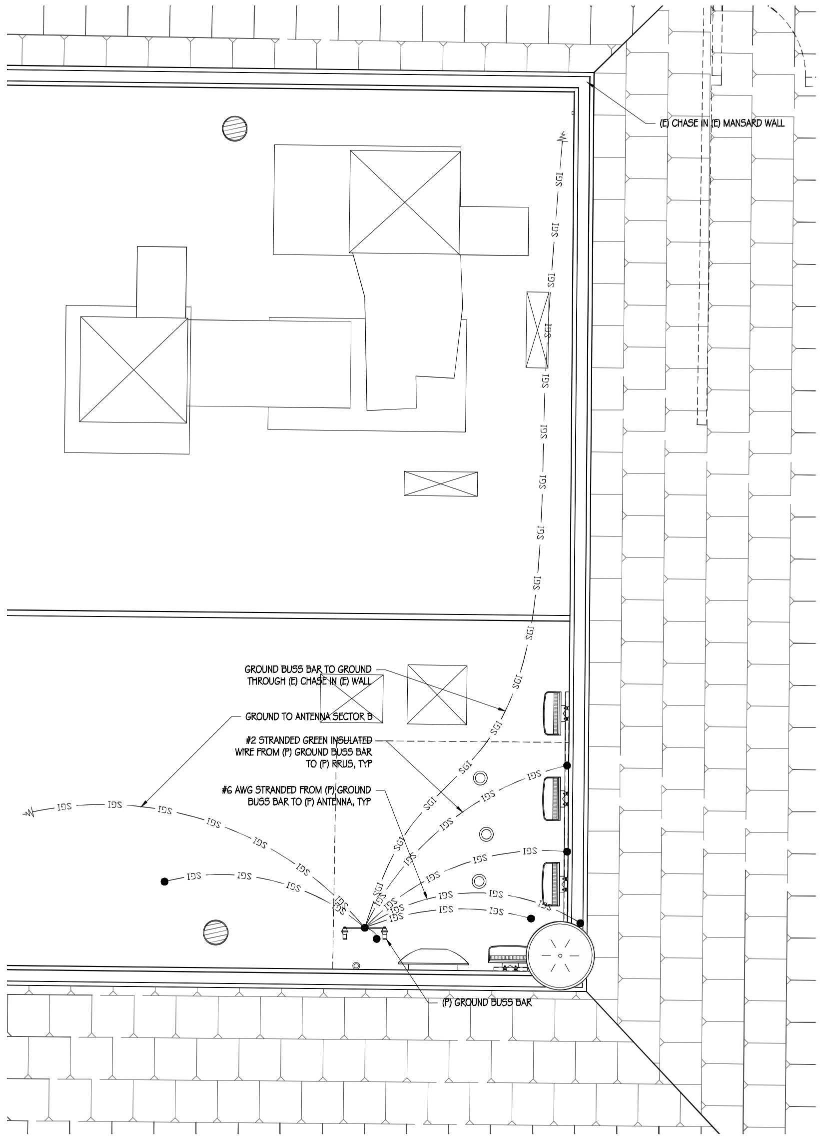
DRAWN BY: G. WATKINS
CHECKED BY: T. LAWRENCE / M. WEISS
APPROVED BY: B. McCOMB
DATE: 07/11/15

SHEET TITLE:
ELECTRICAL SPECS, NOTES & ABBREVIATIONS

SHEET NUMBER
E-1

GROUNDING NOTES

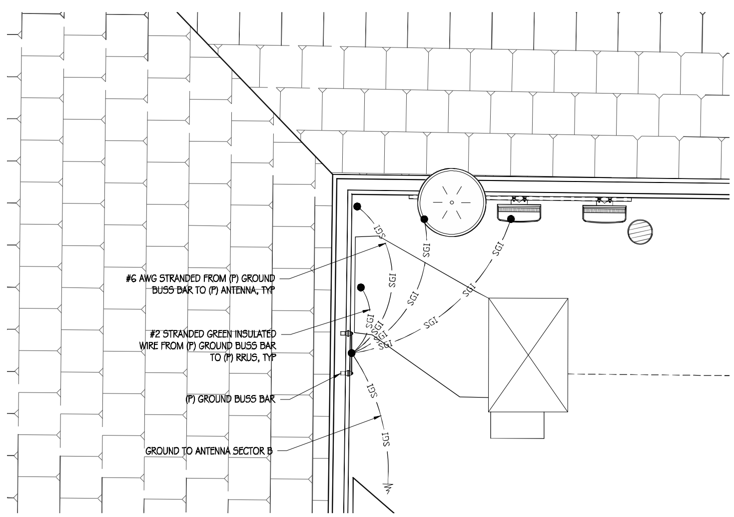
1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING #2 GROUND WIRES AND CONNECT TO SURFACE MOUNTED GROUND BUS BARS AS SHOWN. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS USING MANUFACTURERS PRACTICES. ALL UNDERGROUND WATER PIPES, METAL CONDUITS AND GROUNDS THAT ARE A PART OF THIS SYSTEM SHALL BE BONDED TOGETHER.
3. ALL GROUND CONNECTIONS SHALL BE #2 AWG U.N.O. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE SOLID TIN COATED OR STRANDED GREEN INSULATED WIRE.
4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE, 5 OHMS MAXIMUM. PROVIDE SUPPLEMENT GROUNDING RODS AS REQUIRED TO ACHIEVE SPECIFIED OHMS READING. GROUNDING AND OTHER OPTIONAL TESTING WILL BE WITNESSED BY THE SPRINT REPRESENTATIVE.
5. NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
6. BARE GROUNDING CONDUCTOR SHALL BE HARD DRAWN TINNED COPPER SIZES AS NOTED ON PLAN.
7. ALL HORIZONTALLY RUN GROUNDING CONDUCTORS SHALL BE INSTALLED MINIMUM 30" BELOW GRADE/FROST-LINE IN TRENCH, U.N.O., AND BACK FILL SHALL BE COMPACTED AS REQUIRED BY ARCHITECT.
8. ALL GROUND CONDUCTORS SHALL BE RUN AS STRAIGHT AND SHORT AS POSSIBLE, WITH A MINIMUM 12" BENDING RADIUS NOT LESS THAN 90 DEGREES.
9. ALL SUPPORT STRUCTURES, CABLE CHANNEL WAYS OR WIRE GUIDES SHALL BE BONDED TO GROUND SYSTEM AT A POINT NEAREST THE MAIN GROUNDING BUS "MGB" (OR DIRECTLY TO GROUND-RING).
10. ACCEPTABLE CONNECTIONS FOR GROUNDING SYSTEM SHALL BE:
    a. BURNDY, HY-GRADE U.L. LISTED CONNECTORS FOR INDOOR USE OR AS APPROVED BY PROJECT MANAGER.
    b. CADWELD, EXOTHERMIC WELDS (WELDED CONNECTIONS).
    c. TWO -(2) HOLE TINNED COPPER COMPRESSION (LONG BARREL) FITTINGS (BUS BAR CONNECTIONS).
11. ALL CRIMPED CONNECTIONS SHALL HAVE EMBOSSED MANUFACTURER'S DIEMARK VISIBLE AT THE CRIMP (RESULTING FROM USE OF PROPER CRIMPING DEVICES).
12. PRIOR TO ANY LUG-BUSBAR CONNECTIONS, THE BUSBAR SHALL BE CLEANED BY USE OF "SCOTCH-BRITE' OR PLAIN STEEL WOOL AS TO REMOVE ALL SURFACE OXIDATION AND CONTAMINANTS. A COATING OF "NO-OX-ID" SHALL BE APPLIED TO THE CONNECTION SURFACES.
13. ALL CONNECTION HARDWARE SHALL BE TYPE 316 SS (NOT ATTRACTED TO MAGNETS).
14. THE GROUND RING SHALL BE INSTALLED 24" MINIMUM BEYOND ANY BUILDING DRIP LINE.
15. ELECTRICAL SERVICE EQUIPMENT GROUNDING SHALL COMPLY WITH NEC, ARTICLE 250-82 AND SHALL BOND ALL EXISTING AND NEW GROUNDING ELECTRODES. NEW GROUNDING ELECTRODE SHALL INCLUDE BUT NOT LIMITED TO GROUND RODS, GROUND RING IF SERVICE IS WITHIN THE RADIO EQUIPMENT LOCATION, BUILDING STEEL IF APPLICABLE, COLD WATER CONNECTIONS MUST BE MADE ON THE STREET SIDE OF MAIN SHUT-OFF VALVE.



TN

EQUIPMENT GROUDNING PLAN & ANTENNA GROUNDING PLAN A

1/2"=1'



TN

ANTENNA GROUNDING PLAN B

1/2"=1'

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APPROVED BY: B. McCOMB
DATE: 07/11/15

SHEET TITLE:
ELECTRICAL GROUND DIAGRAMS

SHEET NUMBER
E-2

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)

POWER AND TELCO NOTES:

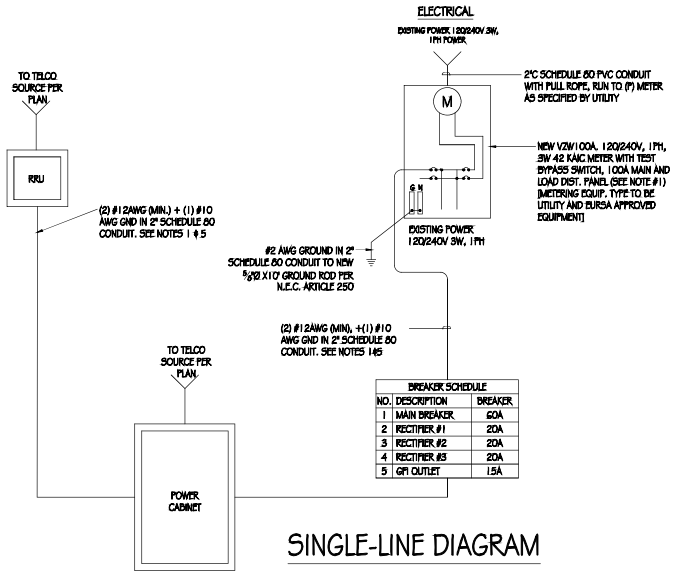
1. POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY THE UTILITY COMPANIES.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT SCOPE OF WORK.
3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE.
4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

NOTES:

1. SUBCONTRACTOR SHALL PROVIDE METER WITH DIST. PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/ UTILITY CABINET.
2. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
3. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
4. FIELD ROUTE CONDUIT TO CABINETS AS REQUIRED.
5. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.

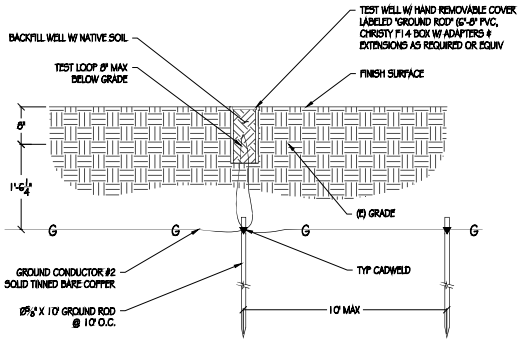
GENERAL ELECTRICAL NOTES:

1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION.
2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS.
4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND #6 AWG MAY BE TYPE "THWN" OR "TWN".
8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
9. UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, DUAL ELEMENT FUSES SIZED TO EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR UL LISTED FOR WET ENVIRONMENT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.

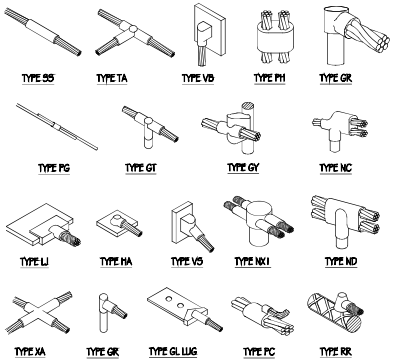


BREAKER SCHEDULE		
NO.	DESCRIPTION	BREAKER
1	MAIN BREAKER	60A
2	RECTIFIER #1	20A
3	RECTIFIER #2	20A
4	RECTIFIER #3	20A
5	GFI OUTLET	15A

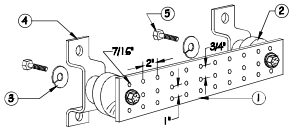
SINGLE-LINE DIAGRAM



1 TEST WELL & GROUND ROD DETAIL
1"=1'



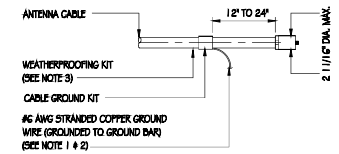
2 EXOTHERMIC WELD DETAILS
1"=1'



NOTES:

1. GALVANIZED STEEL GROUND BAR, HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4 OR APPROVED EQUAL
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO., CAT. NO. 3015-8 OR APPROVED EQUAL
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO., CAT NO. A-6056 OR APPROVED EQUAL
5. 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO., CAT NO. 3012-1 OR APPROVED EQUAL
6. INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPINE STRUCTURE. CONNECTION TO TOWER/MONOPINE STRUCTURE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

3 GROUND BAR DETAIL
1"=1'



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

4 GND KIT DETAIL
NTS

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2785 MITCHELL DRIVE, SUITE #9
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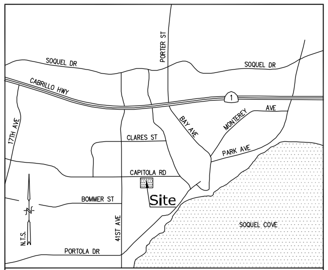
SHEET TITLE:
ELECTRICAL SINGLE-LINE DIAGRAM & DETAILS

SHEET NUMBER
E-3



Vicinity Map

Easements

- EASEMENT AGREEMENT BY CAPITOLA OFFICE PLAZA, LTD., A CALIFORNIA LIMITED PARTNERSHIP TO LLOYD J. MANSON, DATED 3/5/1984 RECORDED 9/17/1984 IN BOOK 3756 PAGE 653 IN INSTRUMENT NO. 44570.
(**PLOTTED HEREON**)
- GRANT OF EASEMENT BY REDWOOD RETREAT COMPANY, A GENERAL PARTNERSHIP TO PACIFIC BELL, A CORPORATION, DATED 11/15/1985 RECORDED 11/27/1985 IN BOOK 3913 PAGE 845 IN INSTRUMENT NO. 060395.
(**PLOTTED HEREON**)
- EASEMENT BY REDWOOD RETREAT INVESTMENT COMPANY, A PARTNERSHIP TO PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION, DATED 2/12/1986 RECORDED 2/25/1986 IN BOOK 3946 PAGE 370 IN INSTRUMENT NO. 009988.
(**PLOTTED HEREON**)
- SATISFACTION OF EASEMENT AGREEMENT, DATED 3/8/1987 RECORDED 3/16/1987 IN BOOK 4127 PAGE 366 IN INSTRUMENT NO. 016893.
(**PLOTTED HEREON**)

18. GRANT OF PARKING EASEMENT BY REDWOOD RETREAT INVESTMENT COMPANY, A CALIFORNIA GENERAL PARTNERSHIP TO CALIFORNIA STATE AUTOMOBILE ASSOCIATION, A CALIFORNIA CORPORATION, DATED 11/27/1989 RECORDED 7/10/1990 IN BOOK 4700 PAGE 422 IN INSTRUMENT NO. 45257.
(BLANKET IN NATURE OVER EXISTING PARKING LOT)

Access Easement/Lease Area

TO BE DETERMINED

Geographic Coordinates at Center of Proposed Sectors

1983 DATUM: LATITUDE 36° 58' 24.31"N LONGITUDE 121° 57' 39.00"W
ELEVATION = 81.8 FEET ABOVE MEAN SEA LEVEL

CERTIFICATION:
THE LATITUDE AND LONGITUDE SHOWN ABOVE ARE ACCURATE TO WITHIN +/– 15 FEET HORIZONTALLY AND THAT THE ELEVATIONS SHOWN ABOVE ARE ACCURATE TO WITHIN +/– 3 FEET VERTICALLY. THE HORIZONTAL DATUM (GEOGRAPHIC COORDINATES) IS IN TERMS OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83) AND IS EXPRESSED IN DEGREES (°), MINUTES (') AND SECONDS ("), TO THE NEAREST HUNDREDTH OF A SECOND. THE VERTICAL DATUM (ELEVATIONS) IS IN TERMS OF THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND IS DETERMINED TO THE NEAREST TENTH OF A FOOT.

Basis of Bearings

THE STATE PLANE COORDINATE SYSTEM OF 1983 (NAD 83), CALIFORNIA ZONE 3.

Bench Mark

THE CALIFORNIA SPATIAL REFERENCE CENTER C.O.R.S "P212", ELEVATION = 230.71 FEET (NAVD 88).

Date of Survey

MARCH 26, 2015

Title Report

PREPARED BY: U.S. TITLE SOLUTIONS
ORDER NO.: 51377-CA-1505-5010
DATED: MAY 21, 2015

Legal Description

PARCEL A AS THE SAME IS SHOWN UPON THAT CERTAIN PARCEL MAP FILED FOR RECORD JANUARY 31, 1990 IN VOLUME 50 OF PARCEL MAPS, PAGE 59, SANTA CRUZ COUNTY RECORDS.

Assessor's Parcel No.

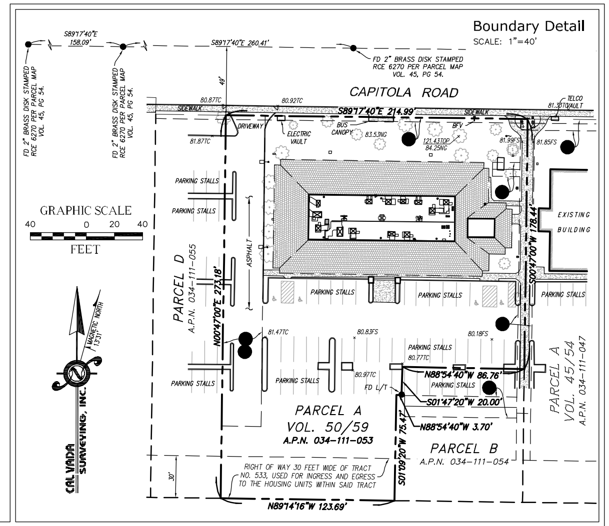
034–111–053

Legend

Symbol	Description	Symbol	Description
	AC–UNIT	NG	NATURAL GROUND
BFV	BACKFLOW VALVE	PL	PROPERTY LINE
	BLOCK WALL	PIV	POST INDICATOR VALVE
CL	CENTER LINE	OT	OVERHANG TOP
	CONCRETE PAVEMENT	R	ROOF
FS	FINISH SURFACE		ROOF DRAIN
	FIRE DEPARTMENT CONNECTION	TC	TOP OF CURB
	FIRE HYDRANT	TP	TOP OF PARAPET
	FLAG POLE	TOP	TOP OF STRUCTURE
	FOUND MONUMENT		TREE
	HANDICAP		VENT
ICV	IRRIGATE CONTROL VALVE		WATER FAUCET
	LATITUDE–LONGITUDE COORDINATE		WATER METER
	LIGHT		WHIP ANTENNA

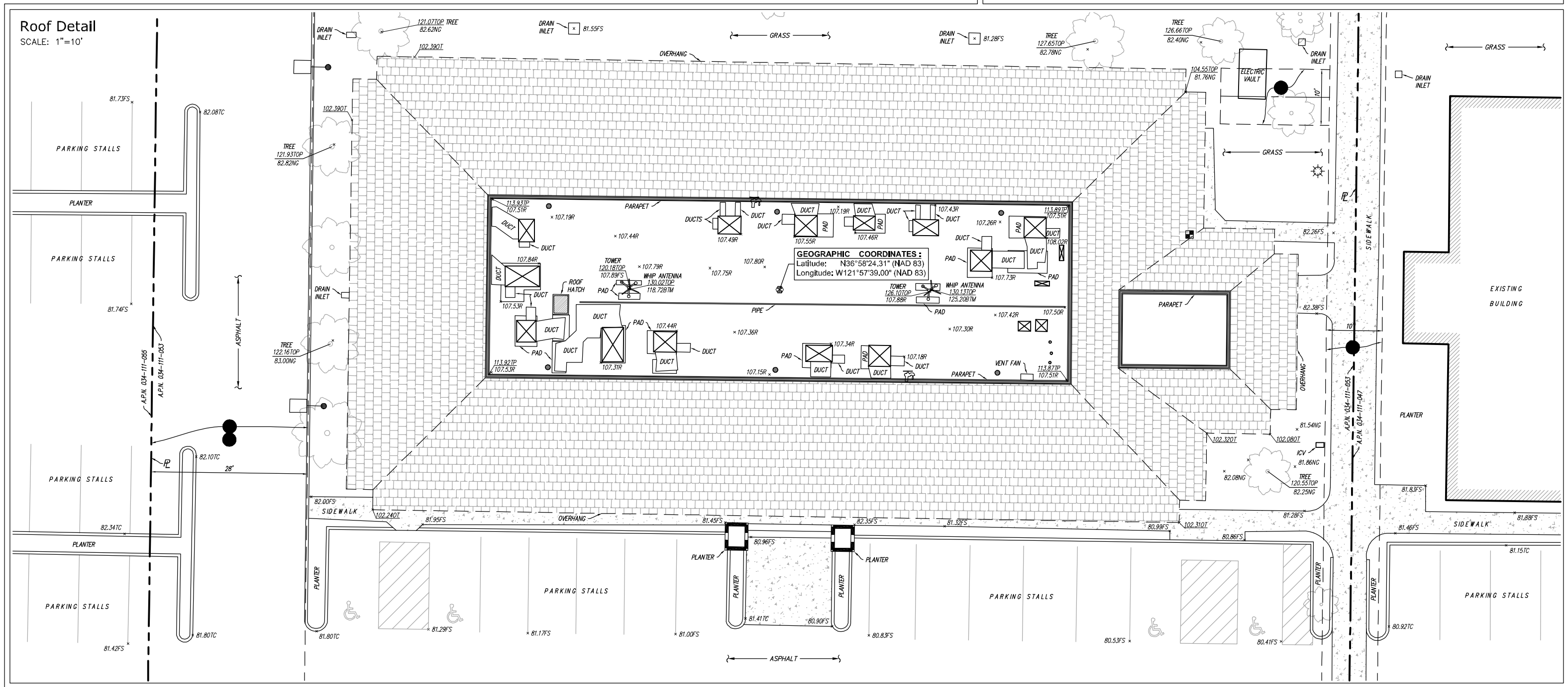
Boundary Detail

SCALE: 1"=40'



Roof Detail

SCALE: 1"=10'



verizon wireless

PLANS PREPARED BY:

CAL VADA SURVEYING, INC.
411 Jenks Cir., Suite 205, Corona, CA 92880
Phone: 951-280-9960 Fax: 951-280-9746
Toll Free: 800-CALVADA www.calvada.com
JOB NO. 15168

CONSULTING GROUP:

PRECISION DESIGN & Drafting, INC.
Phone: (530) 823-6546 www.pdnd.com
11768 Atwood Rd. Suite 20 Auburn, CA 95603

NO.	DATE:	DESCRIPTION:	BY:
	4/4/15	SUBMITTAL	AV
1	1/21/16	TITLE REPORT	DG
2	3/30/16	CLIENT COMMENTS	RG

SITE INFORMATION:

CAPITOLA MALL SC2

4400 CAPITOLA ROAD,
CAPITOLA, CA 95010
SANTA CRUZ COUNTY

SEAL:

LICENSED LAND SURVEYOR
Armando D. DuPont
L.S. 7750
Exp. 12-31-17
STATE OF CALIFORNIA

SHEET TITLE:

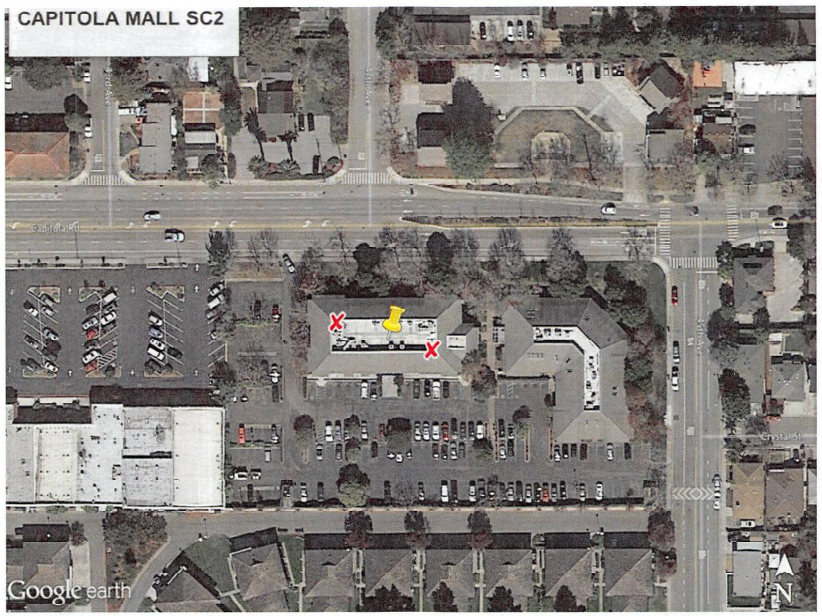
TOPOGRAPHIC SURVEY

SHEET NUMBER: C1

REV: 2

Attachment: Verizon Project Plans and Information (1540 : Verizon Facility at 4400 Capitola Road)

OVERVIEW

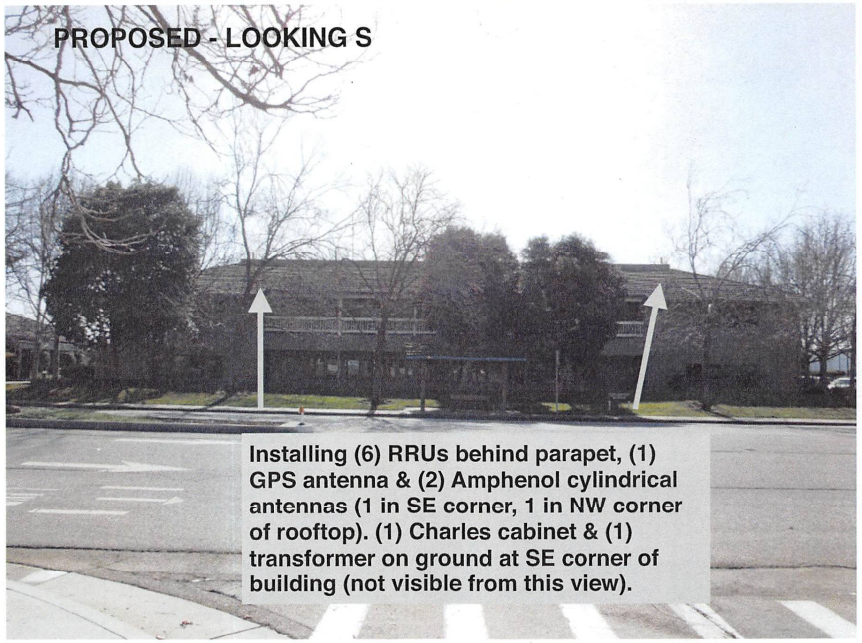


ADL Simulations, Inc. ✦ (415) 559-2121 ✦ adlsimulations@gmail.com

verizon wireless

CAPITOLA MALL SC2
4400 Capitola Rd.
Capitola, CA 95010

beacon development



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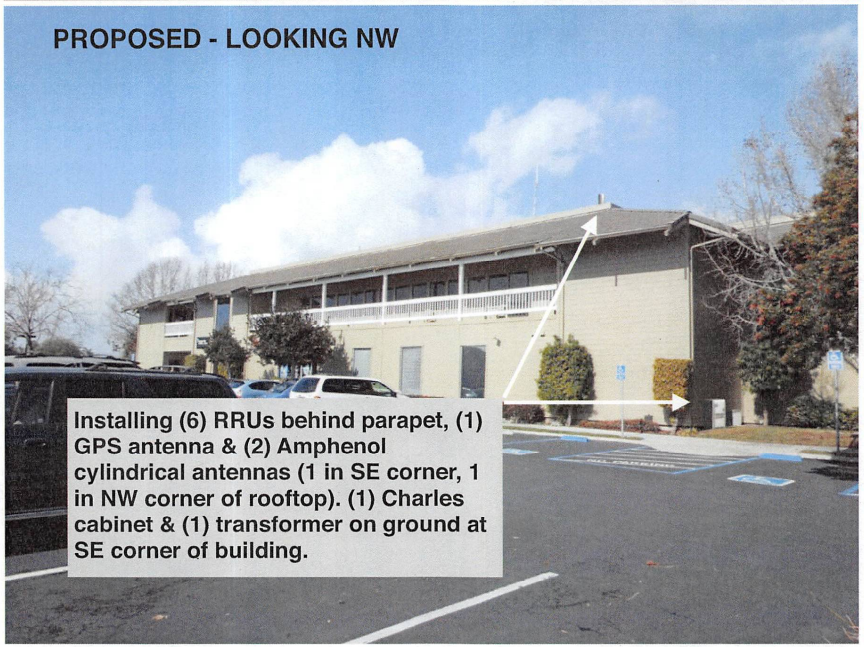

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EXAMPLE INSTALLATION

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Capitola, CA 95010

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EXAMPLE INSTALLATION

Typical canister installation. Note that this is a 4' canister whereas the proposed installation is a 2' canister.

EXAMPLE INSTALLATION

Typical canister installation. Note that this is a 4' canister whereas the proposed installation is a 2' canister.

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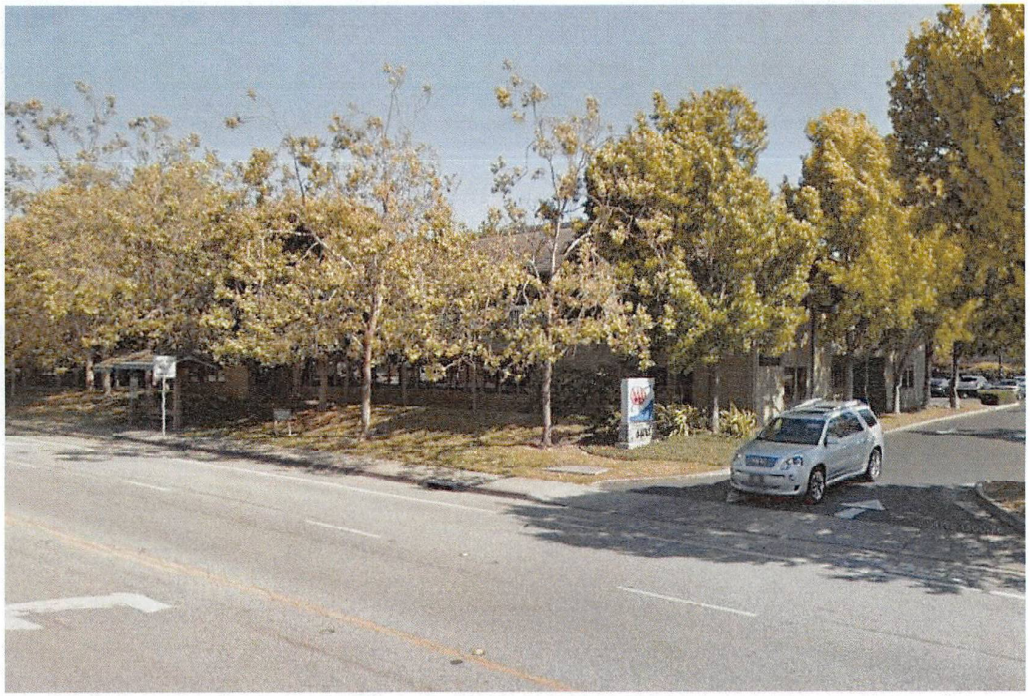
verizon wireless

CAPITOLA MALL SC2
4400 Capitola Rd.
Capitola, CA 95010

beacon development

ALTERNATIVE SITE ANALYSIS
Capitola Mall SC2

(A) 36.973483°, -121.960892°



Current Candidate is building located at 4400 Capitola Road. Property owner is Doug Kaplan.

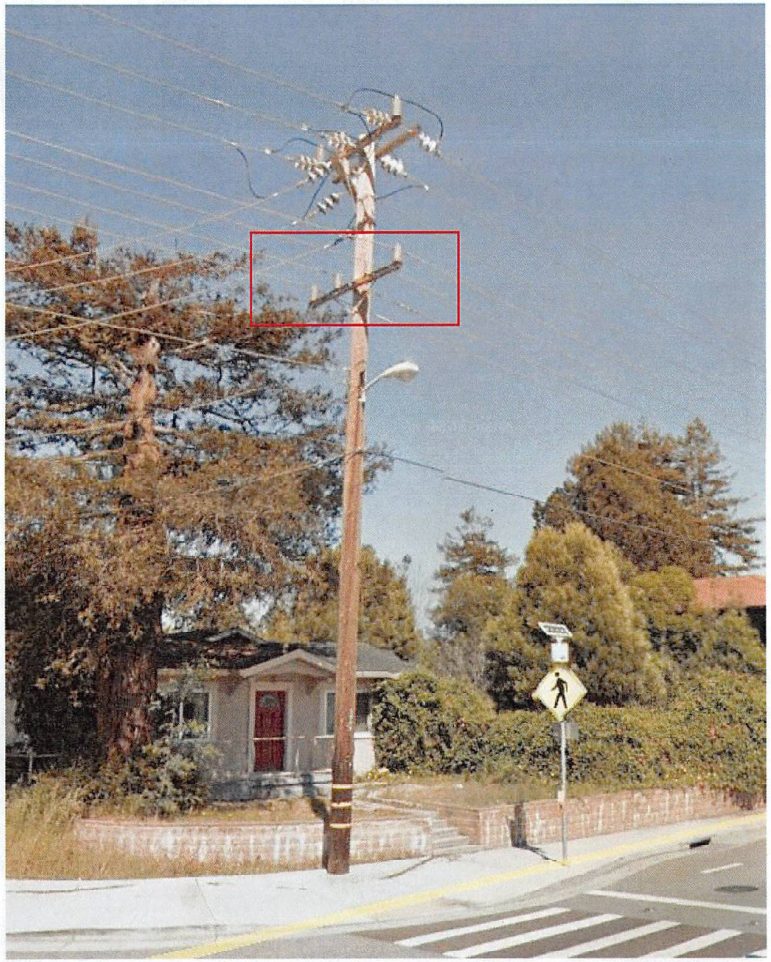
(B) 36.973951°, -121.962183°

Managed by CIF properties.
Difficult to stealth antennas due to shape of roof.

(C) 36.973405°, -121.960163°

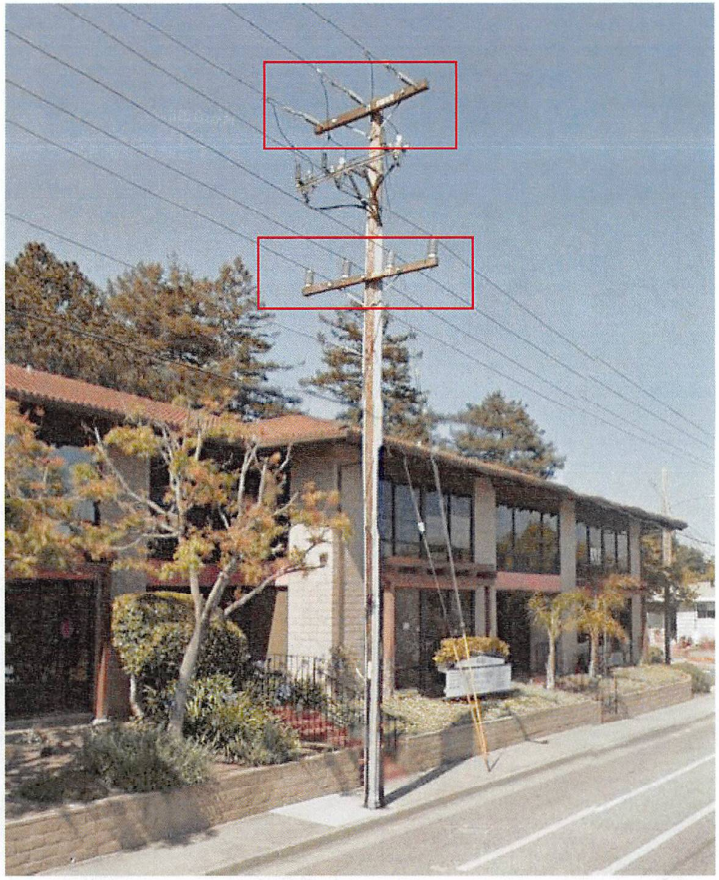
Managed by CIF properties. Unable to negotiate agreement.

(D) 36.973842°, -121.962573°



PG&E pole with a primary riser present. Per GO95 guidelines, we can not legally place our equipment in the 33% climbing space, which would impact the existing use of the 'power' distribution for the neighborhood.

(E) 36.973847°, -121.962222°



PG&E pole with a primary riser present. Per GO95 guidelines, we can not legally place our equipment in the 33% climbing space, which would impact the existing use of the 'power' distribution for the neighborhood.

(F) 36.973616°, -121.961353°

PG&E pole with a primary riser present. Per GO95 guidelines, we can not legally place our equipment in the 33% climbing space, which would impact the existing use of the 'power' distribution for the neighborhood.

(G) 36.973146°, -121.961481°

Single story building - determined didn't have acceptable height.

Safty, Ryan (rsafty@ci.capitola.ca.us)

From: Jason Osborne <jason@beacondev.net>
Sent: Tuesday, July 26, 2016 2:06 PM
To: Safty, Ryan (rsafty@ci.capitola.ca.us)
Cc: Jason Osborne
Subject: Re: 4400 Cap Rd - Verizon
Attachments: Capitola Mall SC2 Capacity Coverage Justification.pptx

Follow Up Flag: Follow up
Flag Status: Flagged

Ryan

It appears the "proposed" did not get into this document. Here it is in the original justification package.

The reason we are going with small cells in this area is to better distribute the cellular traffic. The locations here are low and that is better suited to a small cell plan. A macro would be a tall building or stand alone tower, and there are fewer areas suited for these large installations. In fact, city jurisdictions have been asking for smaller installations for a long time now, so we see this as satisfying both needs.

Concerning the Mall and BofA, We have a site directly south of the mall serving the SW corner of the Mall. For the Mall itself, we have several rings to address that. We have a ring on on the NE corner of the Mall and that should take care of the Mall pretty well. We also have a small cell ring on the of Capitola and 41st St that will cover BofA pretty well. This site is for the area east of the mall. It was named Capitola Mall by a previous engineer just trying to cover the Mall's surrounding areas. I would not have named it Capitola Mall if I were launching the project as I know it causes a little confusion.

Thank you,

Jason F. Osborne
Beacon Development, LLC
3 Rovina Lane
Petaluma, Ca 94952
(415) 559 2121 mbl
(415) 358-5766 efax
Jason@beacondev.net

420 Capitola Avenue
Capitola, California 95010
Telephone: (831) 475-7300
FAX: (831) 479-8879
Website: www.ci.capitola.ca.us

October 7, 2015

Rosemary Byrne (Nexius)
3 Rovina Lane
Petaluma, CA 94952

Subject: 4400 Capitola Rd – Proposed Wireless Facility

Dear Ms. Byrne:

The City of Capitola Community Development Department has completed its review of your application for a Conditional Use Permit to install a wireless facility onto an existing building at 4400 Capitola Road and is providing you with the following information as a guide for further processing of your application.

PROJECT DESCRIPTION
Below is the project description that staff has developed based on the information submitted in your application package. Please review this project description carefully. If the description is inaccurate or incomplete, please contact your assigned planner immediately to correct the information.

> *This is a request for a Conditional Use Permit to allow for a new wireless facility to be built on the roof of an existing building at 4400 Capitola Rd. The proposal involves the construction of six (6) RRU's, one (1) GPS antenna, two (2) cylindrical antennas, and ancillary equipment. The existing commercial/office building is located less than 200 feet from the Planned Development residential facility to the south, and less than 300 feet from the R-1 (Single-Family Residential) zoning district to the east and the RM-LM (Multi-Family Residential) zoning district.*

APPLICATION COMPLETENESS DETERMINATION
The Community Development Department has completed its review of your application and has found it **incomplete** pursuant to Section 65943 of the California Government Code. As detailed herein, additional information and/or corrections need to be submitted in order for staff to continue processing your application.

Project Issues
The following project issue was identified during review of your application. This issue will require a substantial redesign of the project or, if not resolved, will result in the Department recommending denial of your project. This issue was identified based upon information presently available to the City and are subject to change upon submittal of further information or studies:

Chapter 17.98.090-B of the Capitola Municipal Code states "in no event can a wireless facility be located within three hundred feet of a residential or public facility zone" (i.e. "Restricted Zones"). The proposed wireless facility is located within the prohibited 300 foot limit.

Plan Corrections/Additional Information

The following corrections or additional information are necessary in order to continue processing your application.

1. Make the following additions/corrections to the plans:
   a. Submit the following additions to the plans (§17.98.070):
      i. Co-location Statement: at the end of the "Verizon Wireless Statement for the city of Capitola" document, please include a conclusion/summary statement to why co-location was not possible.

         Verizon Response: Colocation is 100% possible on this building, as long as other carriers maintain good business practices and maintains proper distance to eliminate RF interference. Considering carriers collocate on tower and rooftops very often, this will not be an issue on this property.

      ii. Financial Guarantee: a financial guarantee for the removal of the facility in the event that its use is abandoned, or its approval is terminated.

         Verizon Response: Should the facility not be utilized anymore, Verizon is willing to issue a removal bond as a condition of approval. Please note, the owner of the facility would also require we remove our equipment should it no longer be used.

      iii. Screening Techniques: a statement describing the proposed means of visually screening unsightly public views of facilities, and justification of why the proposed height and visual impact cannot be reduced.

         Verizon Response: The proposed design calls for a stealth "can" surrounding the proposed 2' antenna, which will be painted to match the existing roof material. The antenna protrudes exactly 2' 6", which allows the new "antenna" to just extend beyond the roofline to provide cellular coverage. If the new antenna was behind the parapet, it would not work, as the parapet would block the signal from the antenna.

   b. Re-locate the proposed wireless facility so that it is not within 300 feet (§17.98.090-b) or 500 feet (less restrictive of the regulations, §17.98.070) of the following restricted zoning districts:
      i. Single-family residence (R-1)
      ii. Multi-family residence (RM)
      iii. Mobilehome exclusive (MHE)
      iv. Commercial residential (CR)
      v. Parks and open space (P/OS)
      vi. Public facilities (PF)
      vii. Transient rental use overlay (TRO)

OR

2. According to the City Attorney, FCC regulations pertaining to wireless facilities may preempt the City's ability to deny a permit if the applicant can demonstrate that the City's regulations result in an "effective prohibition" of personal services if it prevents a wireless services provider from closing a "significant gap" in coverage. If your application qualifies

for this exception, your application must be updated to show data supporting the significant gap, how the proposed wireless facility would close the gap, coverage of other sites, and evidence of no alternatives. The City would then hire a 3rd party specialized in review of wireless systems to review the information provided.

Verizon Response Item#2:

- *Please find the attached letter from Stafano Iachella, Verizon RF Engineer, who describes our significant gap of LTE coverage. Attachment #1*
- *Please also find the attached Title Report*
- *Please find the attached Alternative Sites Analysis (site selection process)*
- *Updated Survey*

ESTIMATED PROCESSING COST

At time of application, the City took in the following fees and deposits:

Application Intake fee:	$535.50
CEQA Exemption	$106.00
Public Noticing	$376.00
Planner Cost Recovery Deposit	$3,000.00

If you pursue the existing location, an additional $3,500 (roughly) deposit will be required to cover the cost of the 3rd party technical review of the data. If the technical analysis costs more, you will be billed for the additional cost. Review of the current application will likely utilize the entire $3,000 planner cost recovery deposit and the $3,500 technical review deposit.

If you chose to withdraw the application, the city will refund you the unutilized portion of your deposit ($2,000), the CEQA exemption ($106), and the Public Noticing fee ($376).

Please contact the City and inform us on what you would like to be done with your open application. If you have any questions or require additional information, please contact me at 831.475.7300 or by email at rsafty@ci.capitola.ca.us.

Respectfully,

Ryan Safty
Assistant Planner

Verizon Wireless Cell Site Necessity Case – Capitola Mall SC2

Prepared by Verizon Wireless
RF Engineering

Introduction:

There are two main drivers that prompt the creation of a cell site project, coverage and/or capacity. Most sites provide a mixture of both, but increasingly some sites are pure capacity.

Coverage is the need for expanded service often requested by our customers or emergency services personnel. While this initially meant providing coverage in vehicles, as usage patterns have shifted this now means improving coverage inside of buildings and in residential areas.

Capacity is the need for more bandwidth of service. In the simplest form this means a cell site can handle a limited number of voice calls, data mega bites, or total number of active users. When any one of these limits are met the user experience within the coverage area of that cell quickly starts to degrade during the busier hours of use.

Coverage is best shown in coverage maps. We use tools that take into account terrain, vegetation, building types, and cell site specifics to show predictions of the existing coverage and what we expect to see with a given cell site. The prediction models make some assumptions such as that the antennas are above the nearby ground clutter (Buildings and vegetation). Once the antennas fall below the ground clutter the models become inaccurate and cannot tell that specific trees or buildings are blocking the RF signal. Due to this, modeling of tower height requirements is frequently not accurate and misleading.

Capacity is best shown in graphs of usage growth and projected exhaustion. We utilize sophisticated programs to model current usage growth and project it into the future to determine when additional capacity will be required. The algorithms that predict capacity growth output numbers that are not easily explained. Since it takes 2-3 years on average to complete a cell site project, we have to be looking about 3 years into the future to meet future customer demand.

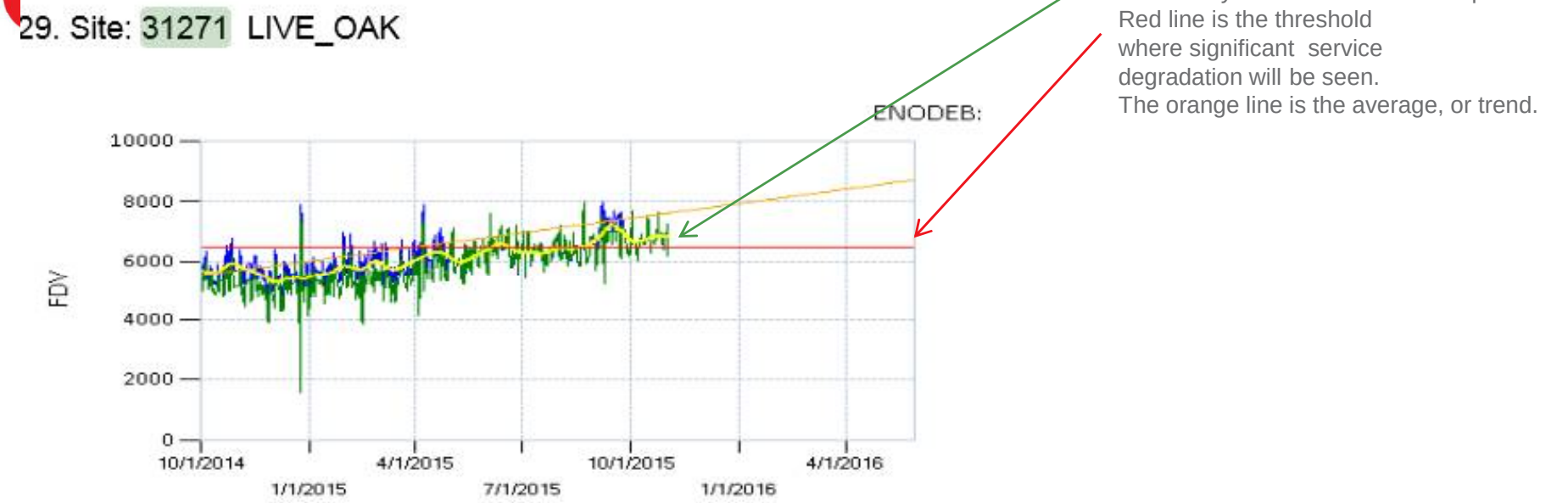
While data capacity may not seem urgent, beginning in 2014 voice traffic began to migrate from the older 3G voice technology to 4G VoLTE (Voice over IP). This will add additional load to the 4G data network. Since voice is delay sensitive, exhaustion of the data network can cause degradation of voice calls including 911 calls.

"Why do you need a site here???"

A good capacity cell will be close to the user population and have the traffic evenly spread around the site. When we cannot get a location that accomplishes being close to the customers and central to the usage, we end up having to build additional cells to meet the demands for service. Capacity sites are generally lower in height than a coverage site with a full cell needing to be above the ground clutter (buildings, trees, & etc.) and a small cell being one that is at or below the ground clutter.

Where our customers use their wireless devices continues to evolve. While we once needed to cover highways and business districts, we are seeing increasing issues with high growth in residential areas. Current statistics show that about 1 of 3 American households no longer have a landline phone. To serve this need we have to increase the cells we have in or very near residential areas.

Need Case for: Capitola Mall SC2

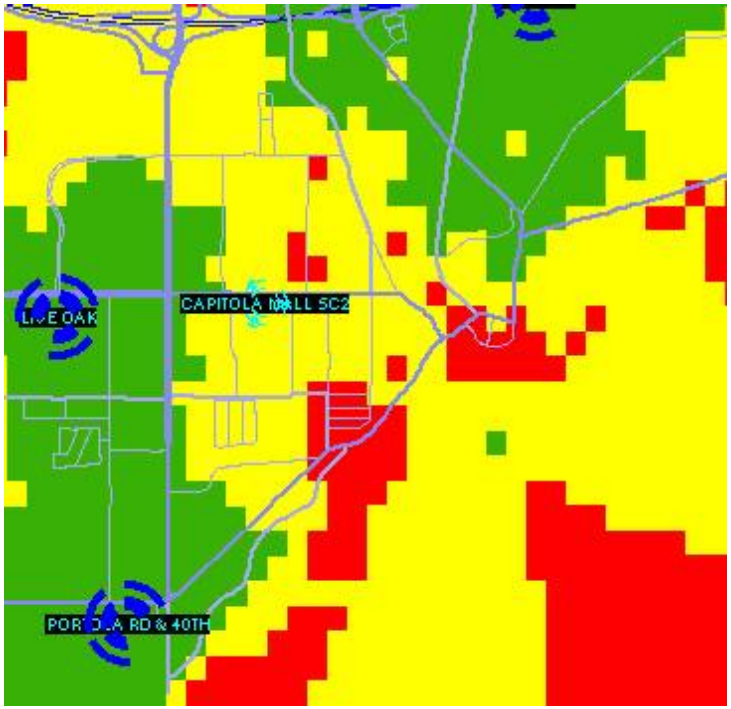


Summary: This graph for the Live Oak cell site shows data usage is high and already exhausted.

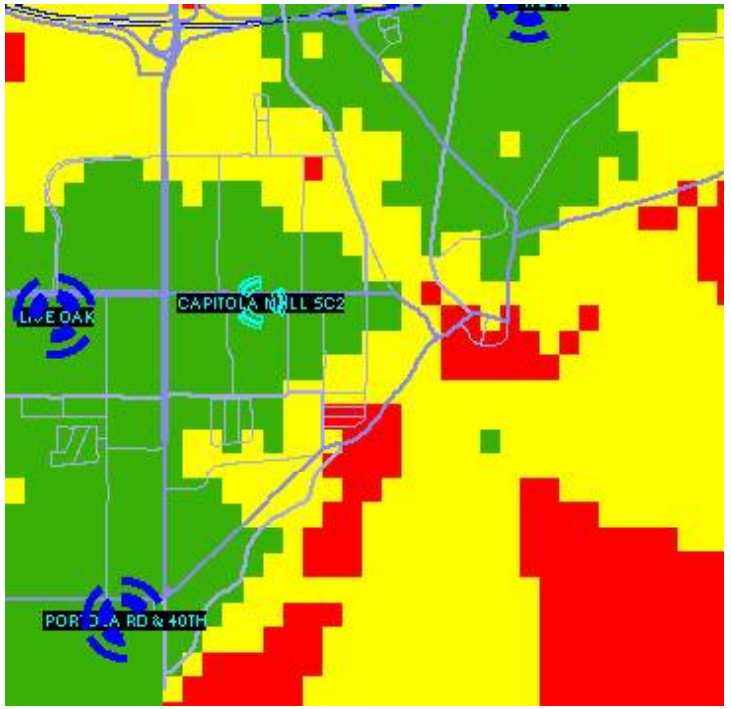
The graph above shows FDV (Forward Data Volume). **FDV** is the total mega bytes of data flowing through the cell. It can rise just above the red line, then reaches a limit and data delivery is delayed. With voice traffic transitioning from the old 3G technology to the new 4G technology we will see further increases in 4G data traffic. Since the 4G network will be carrying 911 calls and is used extensively in support of police and fire emergency response it is critical that we do not allow service quality to degrade. The Live Oak cell site reached the limit around the middle of the summer this year (2015). Data has become severely limited since then.

Need Case for: Capitola Mall SC2

Existing Coverage



Proposed Coverage



The proposed Capitola Mall SC2 site is a capacity site designed to provide data offload for the site Live Oak. The primary objective of this site is to support the rapid growth in 4G data use we are seeing in this area by providing a new small site to serve the library.

Green=Good In-Building, Yellow= Good In-Vehicle, Red=Good on-Street.

2785 Mitchell Drive
Walnut Creek, CA 94598

June 14, 2016

To: Capitola Planning Department

**From: Stefano Iachella, Radio Frequency Design Engineer,
Verizon Wireless Network Engineering Department**

**Subject: Statement Regarding Proposed Wireless Facility
4400 Capitola Road**

Verizon Wireless has identified a significant gap in its fourth-generation long-term evolution ("LTE") service in the Capitola Mall commercial area and residential neighborhood to the east. This area currently receives inadequate service from the existing Verizon Wireless Live Oak facility located 0.5 miles west of the proposed facility and the Capitola facility located 0.9 miles northeast.

Accelerated growth in voice and data usage by Verizon Wireless customers has increased the demand on the existing Verizon Wireless network in a manner that compromises network accessibility and reliability. This accelerating growth in demand has led to capacity exhaustion of the nearby Verizon Wireless Live Oak and Capitola facilities serving the gap area, resulting in severe service degradation, notably at the Capitola Mall commercial center. The majority of Verizon Wireless's new 4G service must be provided using AWS Spectrum, which requires facilities closer together and closer to the end user in order to provide a dominant signal and adequate LTE service. Further, there is an absence of in-building LTE service coverage in the residential neighborhood east of Capitola Mall, including commercial and government buildings along Capitola Road.

The capacity gap and coverage gap described below constitute the "significant gap" Verizon Wireless seeks to serve (the "Significant Gap"). To avoid further degradation of Verizon Wireless service in the Capitola Mall commercial area and fill a gap in in-building coverage in the residential neighborhood to the east, the Significant Gap must be remedied through construction of new infrastructure, in this case, a small building-mounted facility at 4400 Capitola Road (the "Proposed Facility").

Capacity Gap

The identified gap area is served by the existing Verizon Wireless Live Oak facility east-facing antenna sector and the Capitola facility south- and west-facing antenna sectors. These antenna sectors each provide signal to the gap. The Proposed Facility is located such that its antenna sectors will provide new dominant signal to the gap area, particularly the Capitola Mall commercial center,

substantially relieving the overloaded Live Oak facility and Capitola facility antenna sectors.

At times of high traffic volume, the coverage area of the surrounding Verizon Wireless facilities shrinks to accommodate an increasing number of mobile devices closer to that facility. In addition, the volume of voice and data services used by Verizon Wireless customers has been increasing rapidly over time, nearly doubling every year.[1] Verizon Wireless has modified its existing facilities in an effort to maximize the capacity available by adding AWS service; however, as shown in the graphics below, increased demand for voice and data services has already outstripped the capacity of the existing Verizon Wireless antenna sectors servings the gap area.

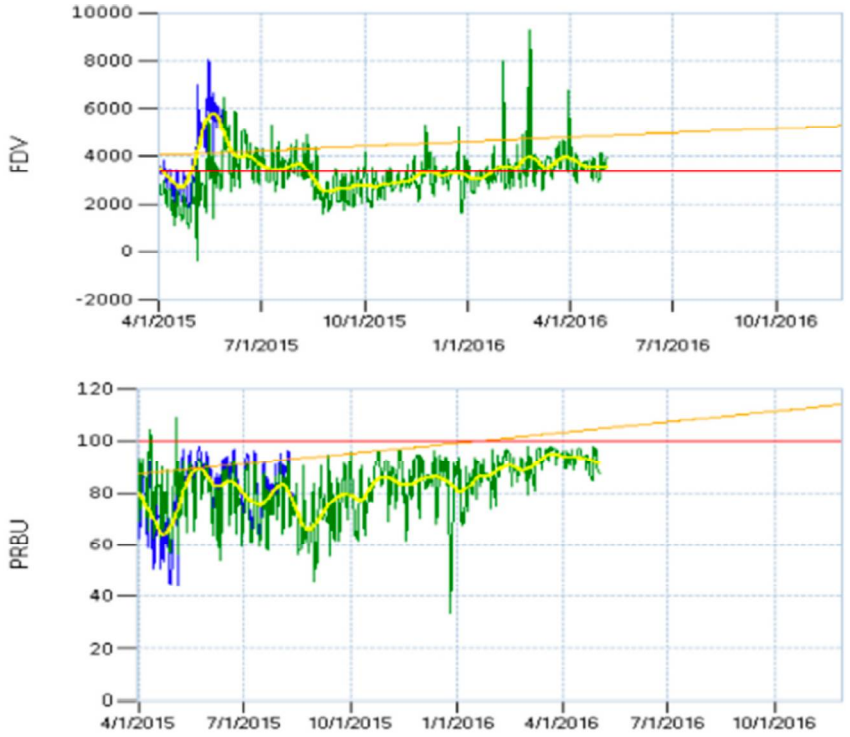
The below graphs show the increased usage over the last year as well as predicted usage through 2016 for the Live Oak facility east-facing antenna sector and Capitola facility south- and west-facing antenna sectors. FDV (Forward Data Volume) is the total volume of data the sector is carrying. PRBU (Physical Resource Block per User) is a measure of the allocation of data blocks.

By comparing the trend line of increasing usage (orange line) with the absolute maximum capacity throughput and spectrum availability of this existing facility (red line), Verizon Wireless RF engineering demonstrates that the Live Oak facility east-facing antenna sector reached capacity exhaustion in early 2015. The Capitola facility south-facing antenna sector reached capacity exhaustion in early 2016, and the Capitola facility west-facing antenna sector is predicted to reach exhaustion in mid-2016. Achieving capacity exhaustion severely compromises the Verizon Wireless network serving the Capitola Mall commercial area and the residential neighborhood to the east, leading to poor connectivity, loss of internet connections and extremely slow data speeds (the "Capacity Gap"). Measurements confirming slow data speeds are provided in the *Drive Test Total Download Throughput* plot below.

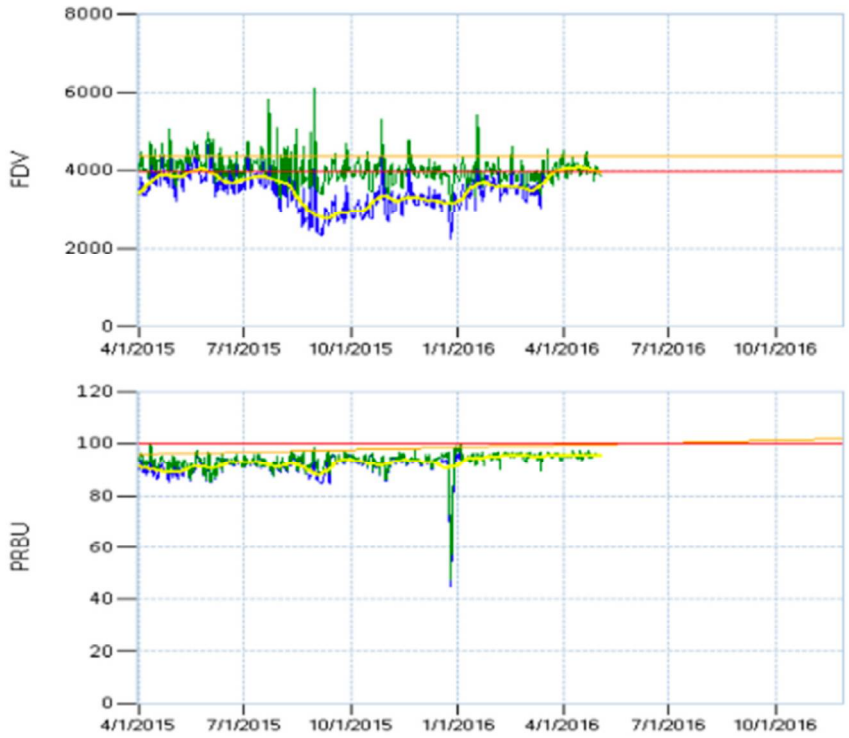
[1] *Federal Communications Commission Report & Order 14-153,* October 17, 2014, ¶ 7.

Capacity Charts
Live Oak Facility East-Facing Antenna Sector

Capacity Charts
Capitola Facility South-Facing Antenna Sector



Capacity Charts
Capitola Facility West-Facing Antenna Sector



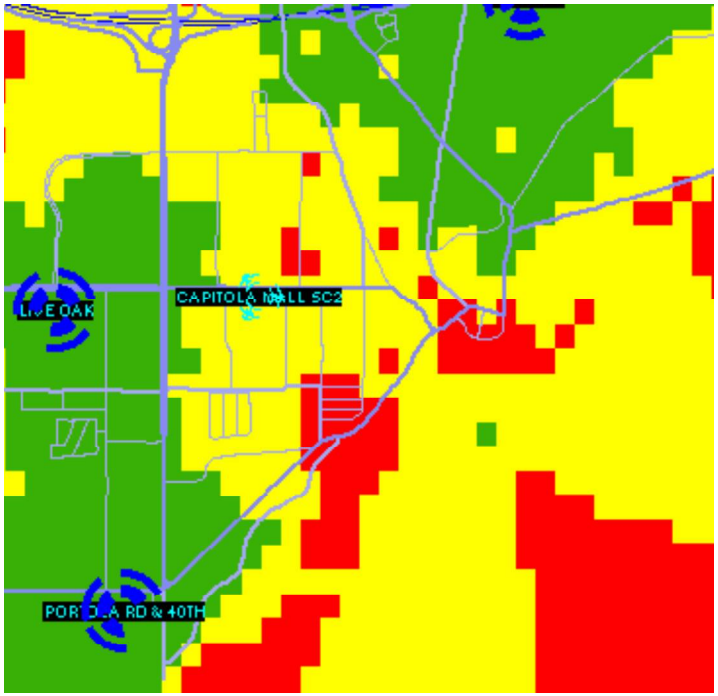
Coverage Gap

The residential neighborhood east of Capitola Mall lacks in-building LTE coverage. This neighborhood includes housing developments such as Capitola Gardens and Villas of Capitola. The in-building LTE coverage gap also includes commercial and government buildings along Capitola Road between 41st Avenue and 45th Avenue such as the Department of Motor Vehicles. Verizon Wireless service is important for visitors to these establishments as well as for public safety and emergency services personnel responding in the area.

Coverage maps like that below provide important information regarding the anticipated level of LTE signal measured in terms of reference signal received power (RSRP), and therefore the projected coverage provided by a site at a given location.

- **Green** indicates RSRP above -75 dBm, reflecting good coverage that meets or exceed thresholds to provide consistent and reliable network service inside buildings.
- **Yellow** indicates RSRP between -75 and -85 dBm, generally representing reliable service in vehicles, but not in buildings.
- **Red** indicates RSRP between -85 and -95 dBm, indicating poor service areas with marginal coverage unsuitable for in-vehicle use.

Existing Coverage

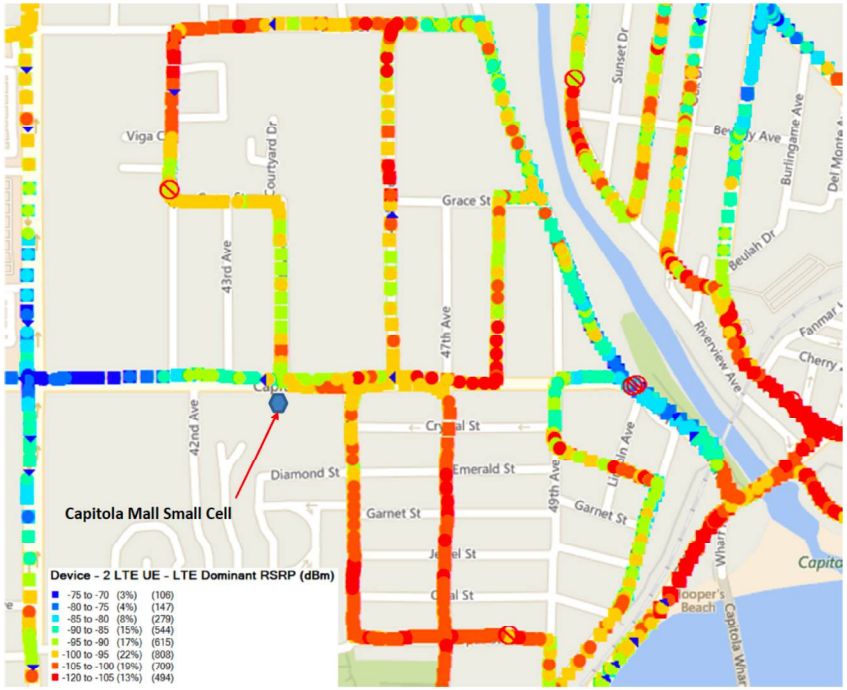


Drive Test

To evaluate the coverage gap and measure data speeds in the area, Verizon Wireless conducted a drive test. On March 29, 2016, during the evening commute between 5:00 p.m. and 6:00 p.m., a test truck was driven through select streets in the gap area to analyze Verizon Wireless service in the area.

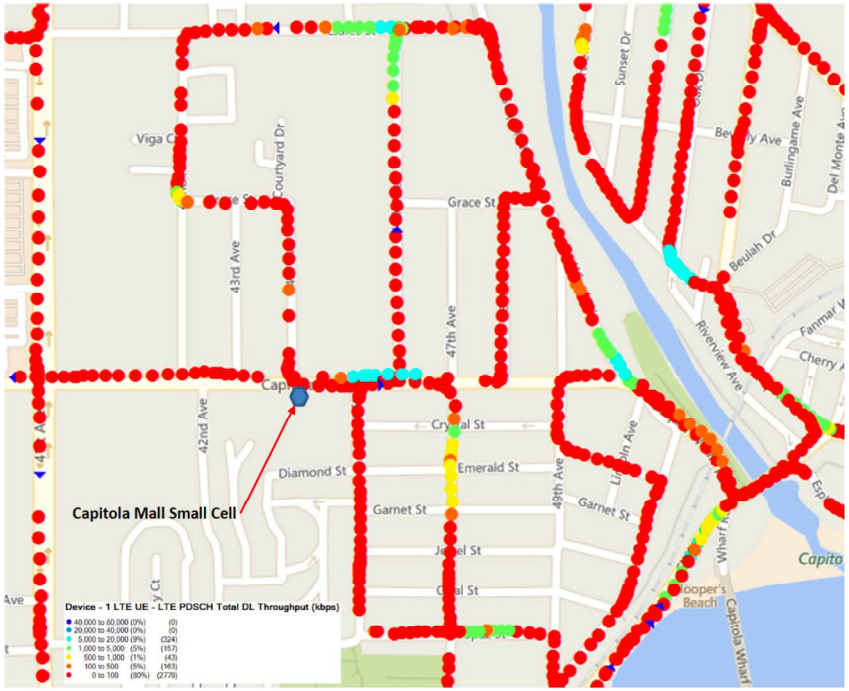
The results of the Verizon Wireless drive test are depicted on the following plots. The first plot, *Drive Test Reference Signal Receive Power*, shows the average LTE signal power received from existing Verizon Wireless facilities serving the area as measured along the drive test route. Strong, usable LTE signal is available in areas with signal above -80 dBm, shown as dark blue shades in limited areas on the plot. These are generally the ranges where calls can be made in a building or vehicle or on the street. Weaker signal (less than -80 dBm) is shown in light blue, yellow, orange and red on the plot. These are areas where Verizon Wireless customers will experience poor service indoors. These areas lack a "dominant" LTE signal from a nearby facility, and as a result, are subject to signal interference and capacity exhaustion. Signal levels in this low range are typical of those found at the edge of coverage from a distant cell site and in areas served by an overloaded antenna sector. The drive test demonstrates that the residential neighborhood east of Capitola Mall is experiencing unacceptably weak LTE signal.

Drive Test Reference Signal Receive Power



The second drive test plot, *Drive Test Total Download Throughput*, shows data packet download speeds for customer mobile phones and devices. Data packets include the digital information used for voice and all other applications of mobile devices. The slowest download speeds, less than 500 kilobytes per second, are shown as red and orange on the plot, and much of the gap area experiences such slow data speeds.

Drive Test Total Download Throughput



Conclusion

The Significant Gap in Verizon Wireless network capacity affects the Capitola Mall commercial area as increasing demands on the existing Verizon Wireless network have outstripped the capacity of the antenna sectors serving the area, resulting in very slow data speeds and poor connectivity. Further, there is a gap in in-building LTE coverage in the residential neighborhood to the east, including commercial and government buildings along Capitola Road. The Proposed Facility is essential to bring new reliable Verizon Wireless service to residents and visitors to the area.

Please feel free to contact me with any questions or comments regarding Verizon Wireless's proposed facility.

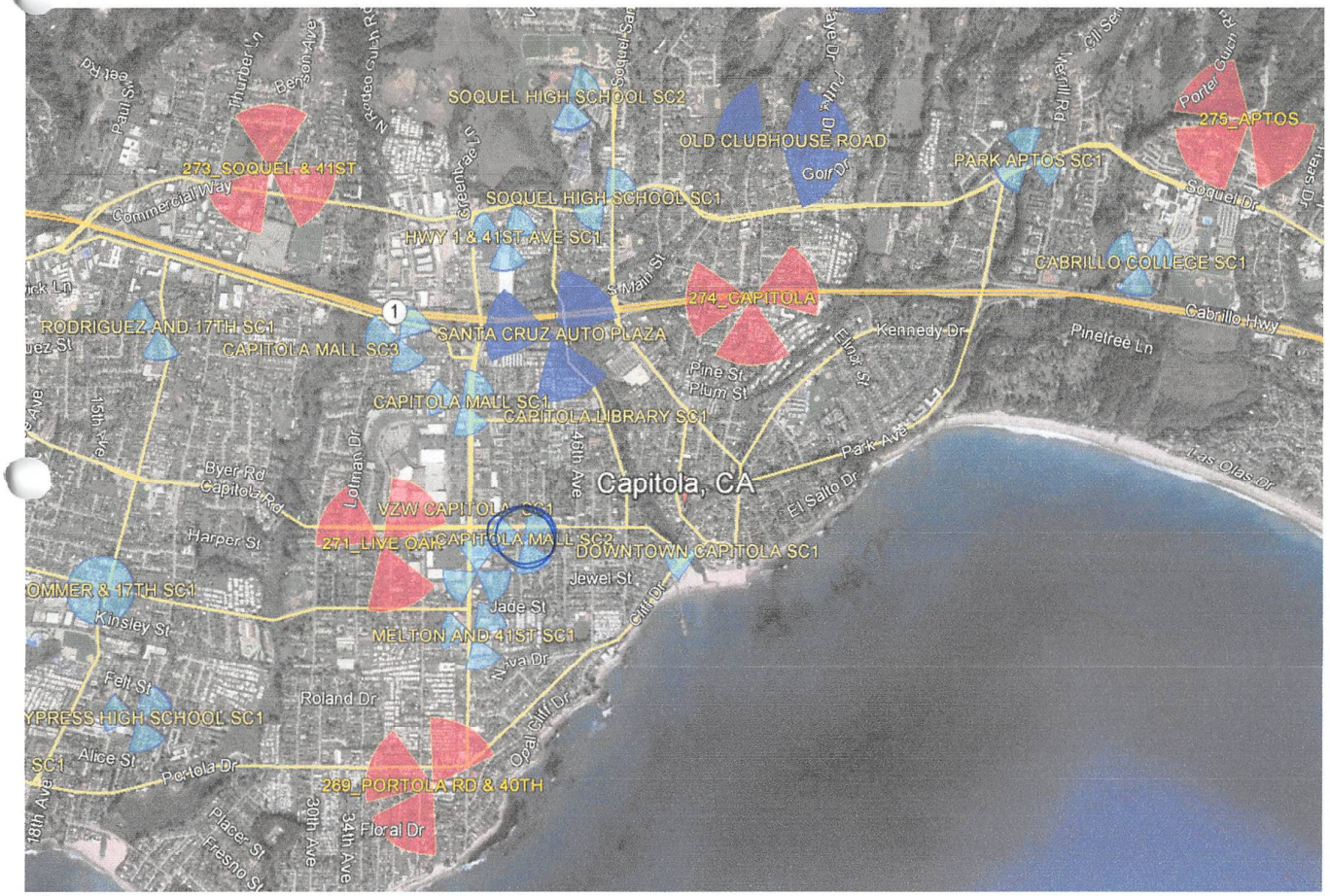
Respectfully submitted,

Stefano Iachella
RF Design Engineer
Network Engineering Department
Verizon Wireless

Verizon Wireless Statement for the city of Capitola

Prepared by Verizon Wireless
RF Engineering

DOWNTOWN CAPITOLA SC1



Existing facilities:

CAPITOLA, LIVE OAK,
PORTOLA RD & 40TH
SOQUEL & 41st, APTOS

Planned facilities:

CAPITOLA MALL SC1
CAPITOLA MALL SC2
CAPITOLA MALL SC3
CAPTIOLA LIBRARY
SANTA CRUZ AUTO PLAZA
PARK APTOS SC1
CABRILLO COLLEGE SC1
OLD CLUBHOUSE ROAD
HWY 1 & 41st AVE SC1
MELTON AND 41ST SC1
SOQUEL HIGH SCHOOL SC1
SOQUEL HIGH SCHOOL SC2
DOWNTOWN CAPITOLA SC1

CAPITOLA

Information on existing facilities within a mile:

CAPITOLA

Location – 36-59-01.02 N, 121-56-58.65 W

Macro cell site on a 72' tall Monopole collocating with NEXTEL, SPRINT, CELL ONE.

CAPITOLA is a major site serving residential and commercial traffic in the eastern portion of the city from Perry Park all the way to Aptos, including malls on Bay Ave, HWY 1, Downtown Capitola, and Soquel High School. This is a heavily exhausted site with too many connected users and very low data speed due to the small number of cell sites in the area.

LIVE OAK

Information on existing facilities within a mile:

LIVE OAK

Location – 36-58-22.80 N, 121-58-10.50 W

Macro cell site on a 108.5' tall Monopole collocating with three other carriers. Verizon antennas are at 60'.

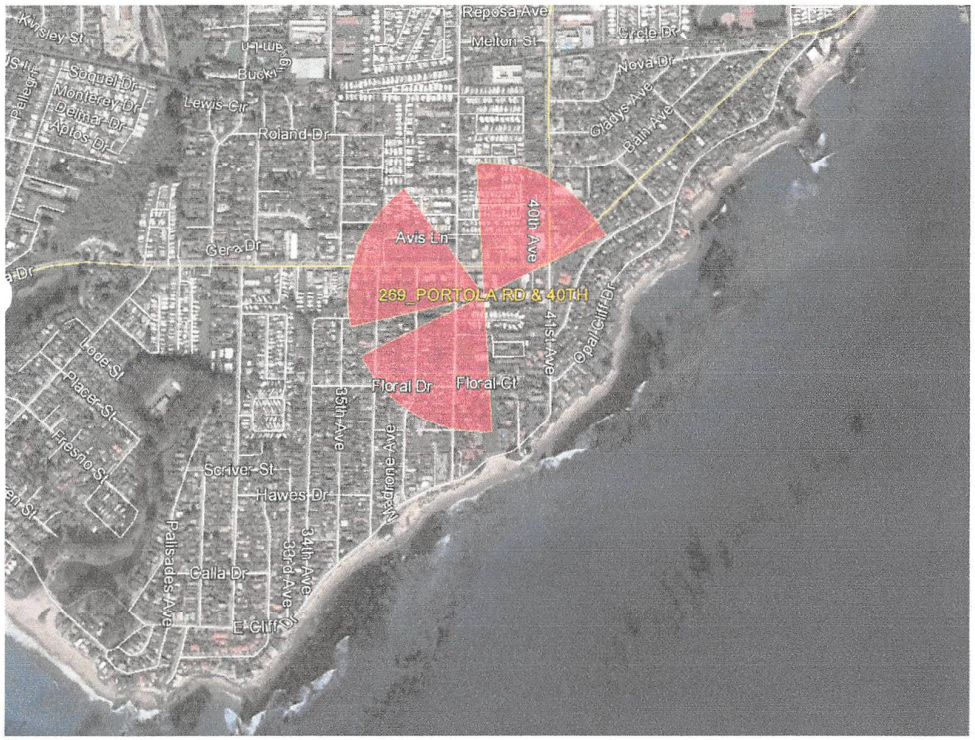
LIVE OAK serves the entire Capitola mall area as well as highly dense population area with a lot of data traffic. Due to the number of users and the amount of data services requested by users, Live Oak is exhausted and is performing poorly. Immediate capacity offload by adding more sites is recommended for better user experience and seamless E911 service.

PORTOLA RD & 40TH

Information on existing facilities within a mile:

PORTOLA RD & 40TH

Location – 36-57-45.90 N, 121-58-00.00 W
Macro cell site on a 35' tall building roof.



PORTOLA RD & 40TH site serves the lower portion of Capitola along the beach, and residential houses in the area. This site is also heavily overloaded and exhausted with a too many connections and too many data usage.

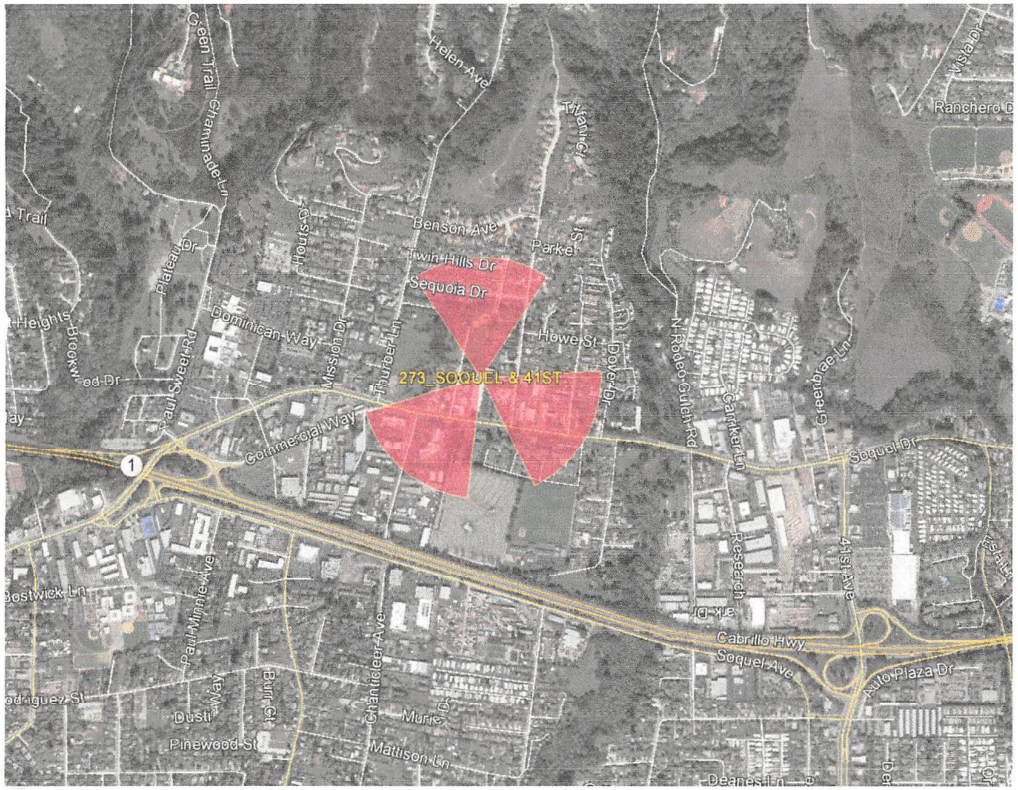
SOQUEL & 41ST

Information on existing facilities within a mile:

SOQUEL & 41ST

Location – 36-59-21.69 N, 121-58-33.60 W

Macro cell site with antennas mounted in a Chimney on a roof of a 35' building.



SOQUEL & 41ST serves the western portion of Soquel and HWY 1. There are some commercial zones and residential areas that have data traffic that is not exhausting overwhelming the macro, but is increasing in a fast pace. We anticipate that this site will reach its maximum capacity at the end of 2015.

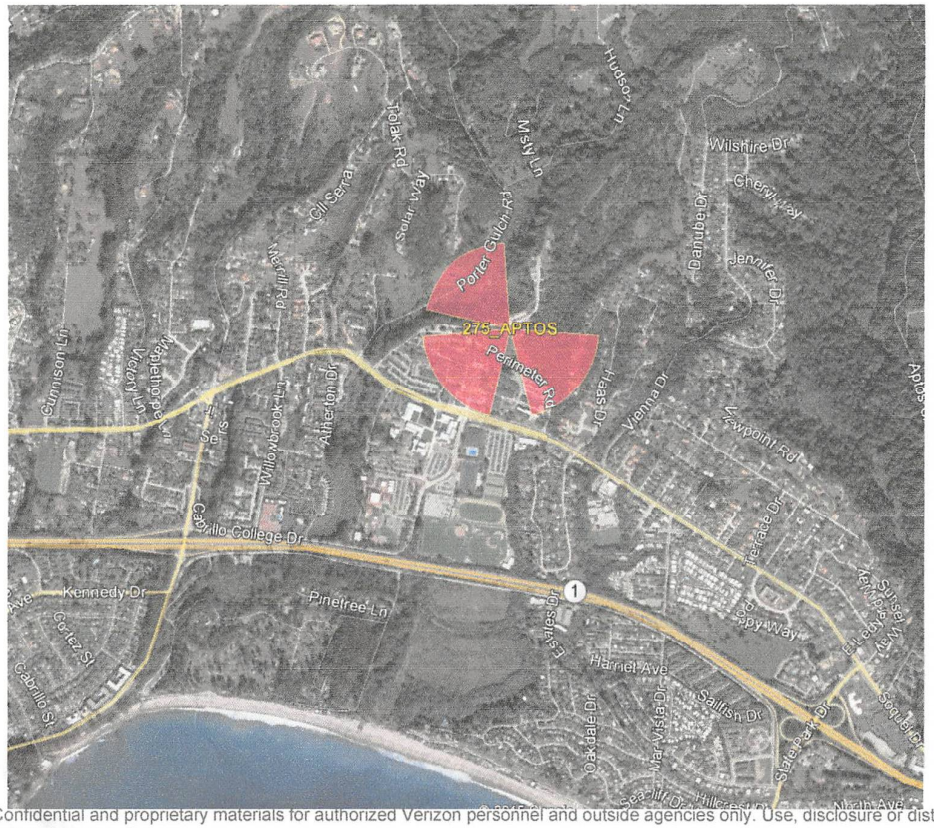
APTOS

Information on existing facilities within a mile:

APTOS

Location – 36-59-28.06 N, 121-55-23.39 W

Macro cell site on a 51’ tall antenna tower.



APTOS is another major site in the area that serves the entire city of Aptos including high traffic areas like Cabrillo College and surrounding residential areas. This site is also heavily exhausted and more cell sites must be added to provide good service in this area.

DOWNTOWN CAPITOLA SC1

Information on planned facilities within a mile:
(Please note that all information regarding "planned" facilities is subject to change.)

CAPITOLA MALL SC1 – 36-58-44.75 N, 121-57-55.40 W
CAPITOLA MALL SC2 – 36-58-24.32 N, 121-57-39.19 W
CAPITOLA MALL SC3 – 36-58-54.79 N, 121-58-07.78 W
Small Cell sites with a minimal design of a single 2' canister antenna on JPA poles to offload traffic from LIVE OAK macro cell site that is currently serving the entire Capitola Mall.

SANTA CRUZ AUTO PLAZA – 36-58-55.48 N, 121-57-37.81 W
Planned macro in the area. Location is not settled.

CAPITOLA LIBRARY – 36-58-46.59 N, 121-57-29.23 W
Small Cell site with a minimal design of a single 2' canister antenna on a JPA pole to offload traffic from CAPITOLA and LIVE OAK site that are currently serving the area.

PARK APTOS SC1 – 36-59-22.86 N, 121-56-04.59 W
Small Cell site with a minimal design of a single 2' canister antenna on a JPA pole to offload traffic from CAPITOLA and APTOS macro sites that are currently serving the area.

CABRILLO COLLEGE SC1 – 36-59-09.05 N, 121-55-32.24 W
Small Cell site with a minimal design of 2' antennas on a light pole to offload traffic from CABRILLO COLLEGE.

DOWNTOWN CAPITOLA SC1

Information on planned facilities within a mile:
(Please note that all information regarding "planned" facilities is subject to change.)

OLD CLUBHOUSE ROAD – 36-59-25.57 N, 121-56-52.35 W
Macro cell site to offload traffic from CAPITOLA and provide better coverage and capacity to the city of Soquel.

HWY 1 & 41st AVE SC1 – 36-59-10.74 N, 121-57-47.59 W
Small Cell site with a minimal design on a rooftop to offload traffic from SOQUEL & 41st and CAPITOLA macro.

MELTON AND 41ST SC1 – 36-58-08.67 N, 121-57-52.54 W
Small Cell site with a minimal design of 2' canister antennas on a rooftop to offload traffic from LIVE OAK and Capitola mall.

SOQUEL HIGH SCHOOL SC1 – 36-59-17.36 N, 121-57-27.65 W
SOQUEL HIGH SCHOOL SC2 – 36-59-33.63 N, 121-57-35.16 W
Small Cell sites with minimal design of a 2' canister antenna on a rooftop to provide coverage and capacity to Soquel High School.

DOWNTOWN CAPITOLA SC1 – 36-58-21.54 N, 121-57-09.30 W
Small Cell site with a minimal design of a 2' canister antenna on a rooftop to provide coverage and capacity to the area and offload existing CAPITOLA site.

Project Description

Verizon Wireless Small-Cell Telecom Facility
4400 Capitola Rd., Capitola, CA 95010
Verizon Site Name: Capitola Mall SC2
APN 034-111-43

Nature of Request

Verizon seeks a Planning Department approval to install a new "microcell" wireless facility on an existing rooftop. The purpose of this facility would be to increase capacity by offloading wireless communications traffic from surrounding areas.

Property Description

The subject property is zoned CN (Neighborhood Commercial) and is owned by Lomak Property Group. The proposed microcell site is a rooftop of a commercial building.

Project Description
The proposal is for a new, unmanned, pole-mounted "small cell" facility including a small concrete pad at ground level on which the equipment cabinet would be installed. The proposal includes:

- Mount (2) (N) 2-ft-high cylindrical antennas, one per sector, centered at 33'-6" AGL and topping at 34'-6".
- Install (6) (N) remote radio units (RRUs) mounted near antennas on mansard wall.
- Install a Charles equipment cabinet on concrete slab on southeast corner of building.

Statement of Operations

The proposed Verizon communication facility will use existing electrical and telephone services, which are readily available to the site. No nuisances will be generated by the proposed facility, nor will the facility injure the public health, safety, morals or general welfare of the community. Verizon technology does not interfere with any other forms of communication devices whether public or private.

Upon completion of construction, fine tuning of the facility may be necessary, meaning the site will be adjusted once or twice a month by a service technician for routine maintenance. No additional parking spaces are needed at the project site for maintenance activities. The site is entirely self monitored and connects directly to a central office where sophisticated computers alert personnel to any equipment malfunction or breach of security.

Because the facility will be un-staffed, there will be no regular hours of operation and no impact to existing traffic patterns. Existing public roads will provide access to the technician who arrives infrequently to service the site. No on-site water or sanitation services will be required as a part of this proposal.

Zoning Analysis

The site of the proposed facility is currently zoned CN (Neighborhood Commercial). This project requires no zoning changes.

Compliance with Federal Regulations

Verizon will comply with all FCC rules governing construction requirements, technical standards, interference protection, power and height limitations, and radio frequency standards. In addition, the company will comply with all FAA rules on site location and operation.

Beacon Development, LLC

LETTER OF AUTHORIZATION

The undersigned is the Owner/Authorized representative ("Owner") and an authorized signatory of the real property ("PROPERTY") described below and hereby authorizes Verizon Wireless its successors and assigns, ("Verizon") and/or its agent, to act as the non-exclusive agent for the sole purpose of filing and consummating any land-use or building permit application(s) necessary to obtain approval of the applicable jurisdiction for Verizon's installation of its antennas and related telecommunications equipment on the existing PROPERTY. This installation shall not affect adjoining lands and will occur only within the area owned by OWNER.

It is understood that this application may be denied, modified or approved with conditions. The above authorization is limited to the acceptance by Verizon only of conditions related to Verizon's installation, provided that any such conditions of approval or modifications will be the sole responsibility of Verizon. OWNER SHALL NOT BE RESPONSIBLE FOR ANY EXPENSE OR OBLIGATION RELATED TO THIS APPLICATION OR THE INSTALLATION — DLC

The above authorization does not permit Verizon to modify or alter any existing permit(s) and/or zoning or land-use conditions or impose any additional conditions unrelated to Verizon's installation of telecommunications equipment without the prior written approval of OWNER.

CAPITOLA ROAD LLC By:

Signature: _____

Print Name: DOUG KAPLAN
MANAGING MEMBER

Date: 9/28/15

Site ID: Capitola Mall SC2

Site Address: 4400 Capitola Road, Capitola, CA 95010

Site APN: 034-111-530

verizon wireless

Verizon Wireless
2785 Mitchell Drive
Building 9
Walnut Creek, CA 94598

June 10, 2015

Subject: Verizon Wireless Maintenance of Proposed Small Cells in Capitola

At a minimum, Verizon Wireless technicians visit their cell sites once a quarter. During this quarterly preventative maintenance, the technician is tasked with observing and identifying any concerns with the cell site. This can include issues with the Verizon Wireless provided equipment (e.g. radio, antennas) as well as issues with the grounds themselves (e.g. sweeping away debris from the ground, identifying roofing hazards).

The technician will usually arrive in a pickup truck and parks in a manner that is unobtrusive and respectful of the landowner's property. On occasion up to three technicians may work on an individual cell site, but typically there will be only be one technician working at a particular time.

Verizon Wireless will also dispatch a technician to repair malfunctioning systems at the cell site itself. Verizon has alarming of its systems to verify when a break-fix is required. These types of issues happen irregularly, so there is no specified frequency of occurrence.

The proposed small cells will be treated much like a standard macro (large cell) deployment in terms of maintenance. Verizon Wireless, at times, may use contractors to aide in break-fix. These contractors are held to the company's standards and are expected to work and conduct themselves in the same manner as Verizon Wireless cell technicians.

The goal with these sites is to be able to provide reliable cell service to the city and to our customers.

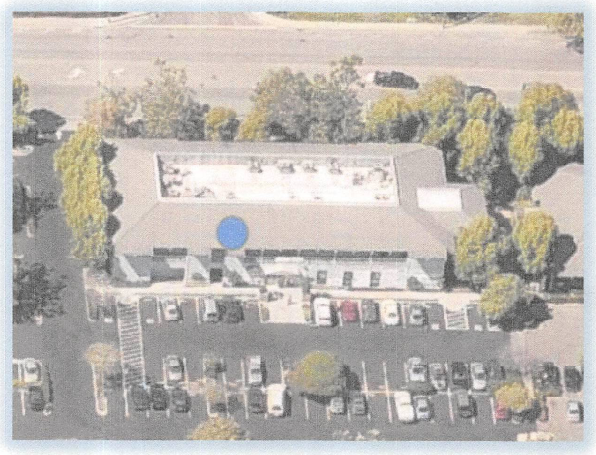
Thanks,

Sanjiv Sinnaduray
Supervisor - Operations

Radio Frequency - Electromagnetic Energy (RF-EME) Jurisdictional Report

Site No. 312144
Capitola Mall SC2
4400 Capitola Road
Capitola, California 95010
Santa Cruz County
36° 58' 24.32" N, -121° 57' 39.19" W NAD83

EBI Project No. 6215003134
June 8, 2015



Prepared for:

Verizon Wireless
2785 Mitchell Drive
Walnut Creek, CA 94598

Prepared by:

EBI Consulting
environmental | engineering | due diligence

Table of Contents

Appendices

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Verizon Wireless to conduct radio frequency electromagnetic (RF-EME) modeling for Verizon Site 312144 located at 4400 Capitola Road in Capitola, California to determine RF-EME exposure levels from proposed Verizon wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of Verizon's proposed antennas at the main roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 5 feet of Verizon's proposed antennas at the main roof level. Additionally, there are areas where workers who may be elevated above the rooftop or ground may be exposed to power densities greater than the occupational limits. Therefore, workers should be informed about the presence and locations of antennas and their associated fields.

At the nearest walking/working surfaces to the Verizon antennas, the maximum power density generated by the Verizon antennas is approximately **3,589.60** percent of the FCC's general public limit (**717.92** percent of the FCC's occupational limit).

The composite exposure level from all carriers on this site is approximately **3,589.60** percent of the FCC's general public limit (**717.92** percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna.

Recommended control measures are outlined in Section 5.0 and within a Site Safety Plan (attached); this plan includes instructions to shut down and lockout/tagout this wireless equipment in accordance with Verizon's standard operating protocol.

1.0 INTRODUCTION

Radio frequency waves are electromagnetic waves from the portion of the electromagnetic spectrum at frequencies lower than visible light and microwaves. The wavelengths of radio waves range from thousands of meters to around 30 centimeters. These wavelengths correspond to frequencies as low as 3 cycles per seconds (or hertz [Hz]) to as high as one gigahertz (one billion cycles per second).

Personal Communication (PCS) facilities used by Verizon in this area operate within a frequency range of 700-2100 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed a distance above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of in areas in the immediate vicinity of the antennas.

MPE limits do not represent levels where a health risk exists, since they are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size or health.

2.0 SITE DESCRIPTION

This project site includes two (2) wireless telecommunication antennas (at two locations) on a rooftop located at 4400 Capitola Road in Capitola, California.

Verizon Antenna Information (proposed Configuration)

Antenna# and Model	Frequency (MHz)	# of Transmitters	Transmit Power (Watts)	Azimuth	Gain (dBd)	Feet above Ground (CL)	X	Y	Z
A1 Amphenol CWT070X06F0Y	700 2100	2 2	20 20	90°	6.9/11.9	32.5 ft AGL	132	32	.5
B1 Amphenol CWT070X06F0Y	700 2100	2 2	20 20	220°	6.9/11.9	32.5 ft AGL	36	63	.5
C1 Amphenol CWT070X06F0Y	700 2100	2 2	20 20	330°	6.9/11.9	32.5 ft AGL	36	63	.5

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general population/uncontrolled exposure limits for members of the general public that may be exposed to antenna fields. While access to this site is

considered uncontrolled, the analysis has considered exposures with respect to both controlled and uncontrolled limits as an untrained worker may access adjacent rooftop locations. Additional information regarding controlled/uncontrolled exposure limits is provided in Section 3.0. Appendix B presents a site safety plan that provides a plan view of the rooftop with antenna locations.

3.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

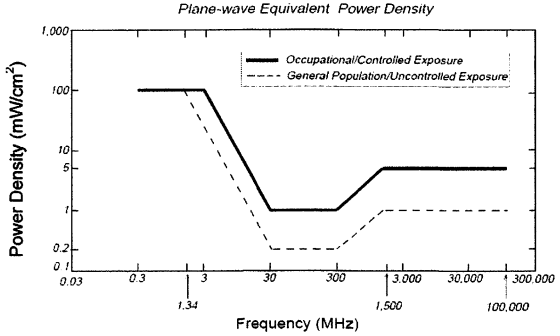
Table 1 and Figure 1 (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm^2). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm^2) and an uncontrolled MPE of 1 $mW/cm2$ for equipment operating in the 1900 MHz frequency range. For the Verizon equipment operating at 700 MHz or 850 MHz, the FCC's occupational MPE is 2.83 mW/cm^2 and an uncontrolled MPE of 0.57 mW/cm^2. These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)
* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870 MHz	2.90 mW/cm^2	0.58 mW/cm^2
Specialized Mobile Radio	855 MHz	2.85 mW/cm^2	0.57 mW/cm^2
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm^2	0.20 mW/cm^2

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by Verizon in this area operate within a frequency range of 700-2100 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

4.0 WORST-CASE PREDICTIVE MODELING

EBI has performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site rooftop-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

The modeling is based on worst-case assumptions for the number of antennas and transmitter power. The modeling assumes a maximum 4-4-4 radio configuration for Sectors A, B and C, with a power level of 43 dbM (20 watts) per transmitter for 700 and 2100, in order to provide a worst-case evaluation of predicted MPE levels. The assumptions used in the modeling are based upon information provided by Verizon, and information gathered from other sources. The parameters used for the modeling are summarized in the RoofView® export files presented in Appendix C.

There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of Verizon's Sector A, B, and C antennas on the sloped roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 5 feet of Verizon's Sector A, B, and C antennas on the sloped rooftop level. Additionally, there are no exceedances in front of the Verizon antennas at the main roof level. At the nearest walking/working surfaces to the Verizon antennas, the maximum power density generated by the Verizon antennas is approximately 3,589.60 percent of the FCC's general public limit (717.92 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 3,589.60 percent of the FCC's general public limit (717.92 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna.

The Site Safety Plan also presents areas where Verizon Wireless antennas contribute greater than 5% of the applicable MPE limit for a site. A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place.

Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix B. It should be noted that RoofView is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage.

5.0 MITIGATION/SITE CONTROL OPTIONS

EBI's modeling indicates that there are areas in front of the Verizon antennas that exceed the FCC standards for general public and occupational exposure. In order to alert people accessing the rooftop, a Guidelines sign and an NOC Information sign are recommended for installation at each access point to the rooftop. A Guidelines sign and yellow Caution sign should be installed at each antenna canister. The RF fields occur over a sloped rooftop with an unprotected edge and therefore barriers are not recommended.

Barriers are recommended for installation when possible to block access to the areas in front of the antennas that exceed the FCC general public and/or occupational limits. Barriers may consist of rope, chain, or fencing. Painted stripes should only be used as a last resort. Due to the unprotected edge of the sloped roof barriers are not recommended, otherwise barriers would be recommended 9 feet in front of the Verizon Sector A, B and C antennas on the sloped rooftop.

These protocols and recommended control measures have been summarized and included with a graphic representation of the antennas and associated signage and control areas in a RF-EME Site Safety Plan, which is included as Appendix B. Individuals and workers accessing the roof should be provided with a copy of the attached Site Safety Plan, made aware of the posted signage, and signify their understanding of the Site Safety Plan.

Implementation of the signage recommended in the Site Safety Plan and in this report will bring this site into compliance with the FCC's rules and regulations.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared a Radiofrequency – Electromagnetic Energy (RF-EME) Compliance Report for telecommunications equipment installed by Verizon Site Number 312144 located at 4400 Capitola Road in Capitola, California to determine worst-case predicted RF-EME exposure levels from wireless communications equipment installed at this site. This report summarizes the results of RF-EME modeling in relation to relevant Federal Communications Commission (FCC) RF-EME compliance standards for limiting human exposure to RF-EME fields.

As presented in the sections above, based on the FCC criteria, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of Verizon's proposed antennas at the main roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 5 feet of Verizon's proposed antennas at the main roof level. Workers should be informed about the presence and locations of antennas and their associated fields. Recommended control measures are outlined in Section 5.0 and within a Site Safety Plan (attached); this plan includes procedures to shut down and lockout/tagout this wireless equipment in accordance with Verizon's standard operating protocol.

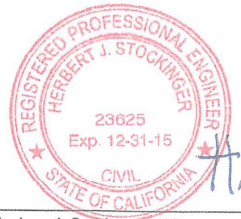
7.0 LIMITATIONS

This report was prepared for the use of Verizon Wireless. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix A

Certifications

Reviewed and Approved by:



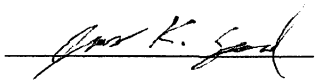
Herbert J. Stockinger, PE
Senior Engineer

Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

Preparer Certification

I, James Speed, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

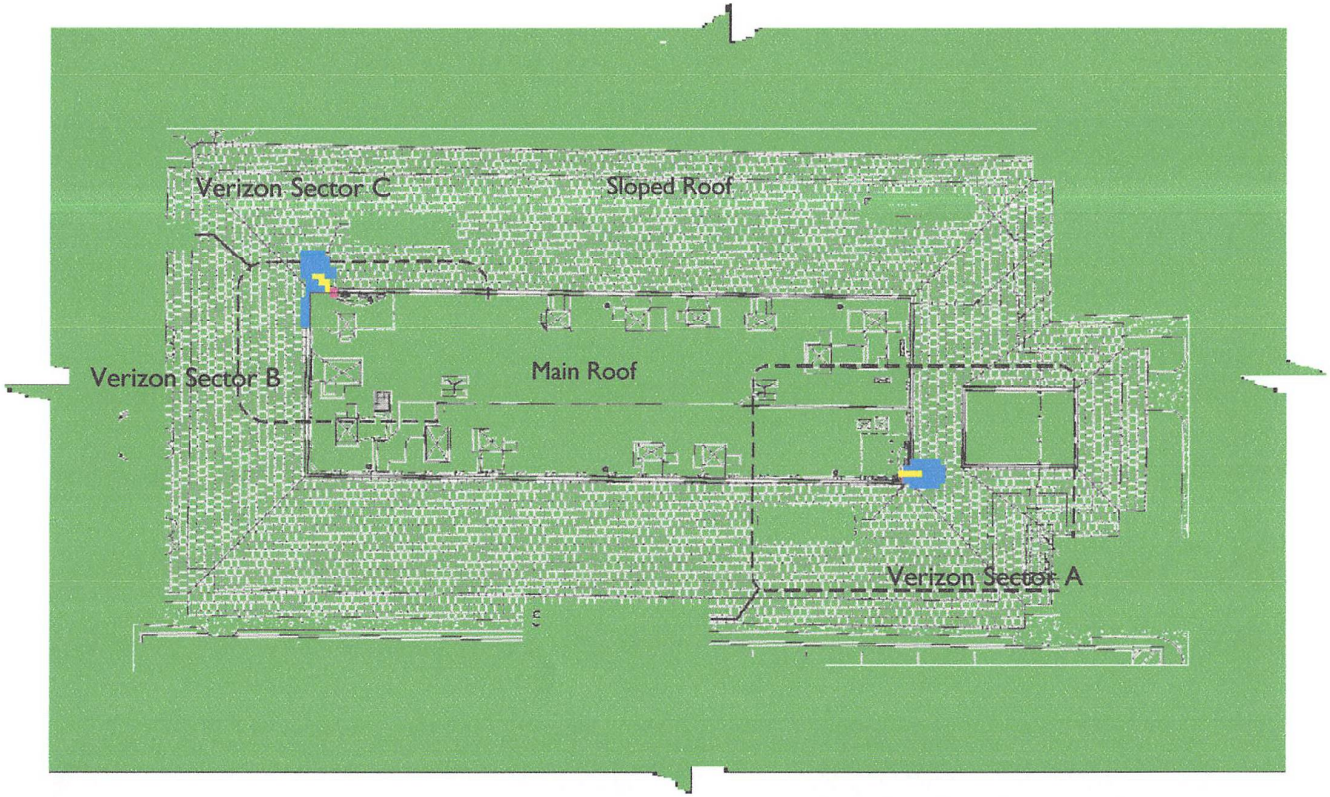


Appendix B

Radio Frequency Electromagnetic Energy

Safety / Signage Plans

% FCC Public Exposure Limit
Exposure Level ≥ 5,000
500 < Exposure Level ≤ 5,000
100 < Exposure Level ≤ 500
Exposure Level ≤ 100



Verizon Antennas

Other Carrier Antennas

Roofview: Composite Exposure Levels

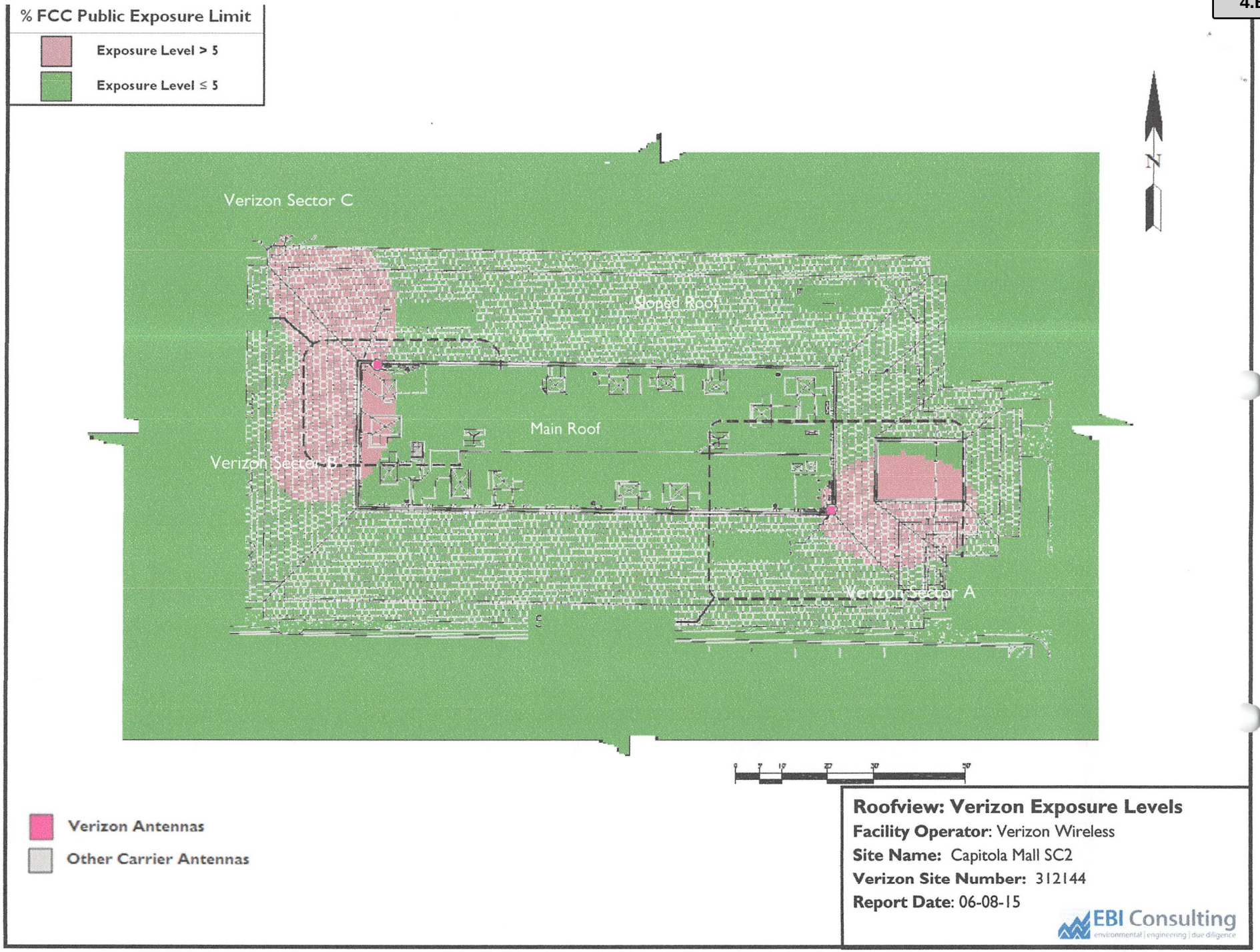
Facility Operator: Verizon Wireless

Site Name: Capitola Mall SC2

Verizon Site Number: 312144

Report Date: 06-08-15

EBI Consulting
environmental | engineering | due diligence



Roofview: Verizon Exposure Levels

Facility Operator: Verizon Wireless

Site Name: Capitola Mall SC2

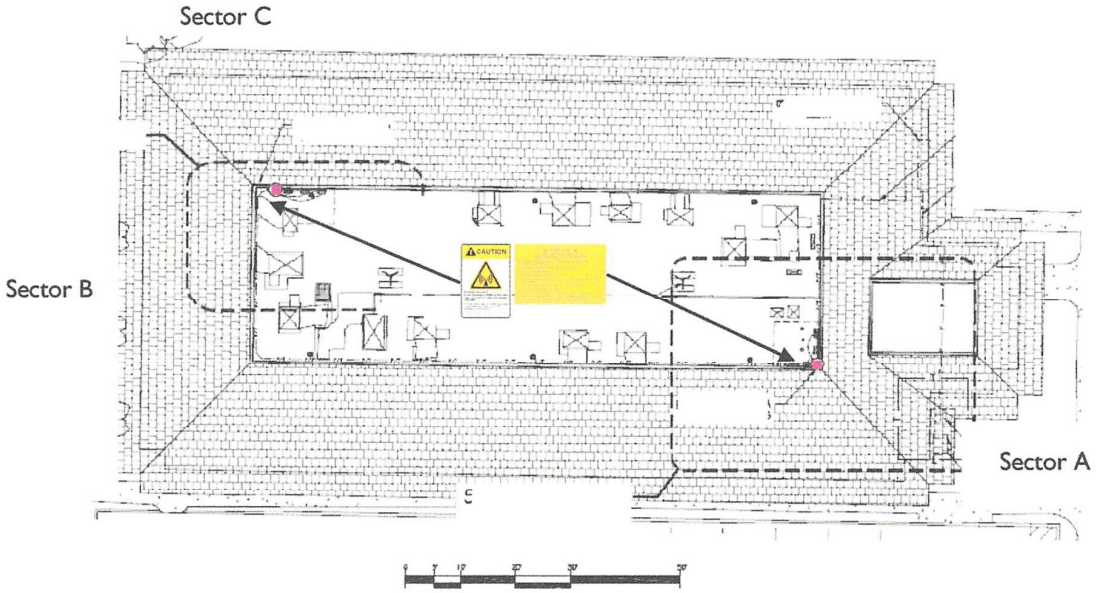
Verizon Site Number: 312144

Report Date: 06-08-15

EBI Consulting
environmental | engineering | due diligence

Verizon Signage Plan

Post at Roof access



Verizon Antennas

Other Carrier Antennas

Sign Image	Description	Posting Instructions	Required Signage
	**Notice To Workers** Informational sign, used to notify workers that there are active antennas installed and provide guidelines for working in RF environments.	Securely post at every point of access to the in a manner conspicuous to all individuals entering thereon as indicated in the signage plan.	1on each access doors and at the antenna sectors
	**NOC Information Sign** Informational sign with NOC Phone Number and Base Transceiver Station (BTS) Number	Securely post at every point of access to the site.	1on each access doors

	**Yellow Caution Sign** Used to alert individuals that they are entering an area where the power density emitted from transmitting antennas may exceed the FCC's maximum permissible exposure limit for the general public and the occupational exposure limit.	Securely post at each antenna canister.	on each access doors and at the antenna sectors

Appendix C

Roofview® Export File

StartMapDefinition

Roof Max Y	Roof Max X	Map Max Y	Map Max X	Y Offset	X Offset	Number of envelope		List Of Areas
120	170	140	190	20	20	1	$AE$81:$G $AE$81:$GR$200	$AE$81:$GR$200

StartSettingsData

Standard	Method	Uptime	Scale Facto	Low Thr	Low Color	Mid Thr	Mid Color	Hi Thr	Hi Color	Over Color	Ap Ht Mult	Ap Ht Method
4	2	1	1	100	1	500	4	5000	2	3	1.5	1

StartAntennaData It is advisable to provide an ID (ant 1) for all antennas

ID	Name	(MHz) Freq	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
VZW A1	LTE	2100	20	2	0	0	0.55		35.24195	Amphenol	CWT070X0	132	32	0.5		2	11.9	61;90		ON•
VZW A1	LTE	700	20	2	0	0	0.35		36.90286	Amphenol	CWT070X0	132	32	0.5		2	6.9	67.2;90		ON•
VZW B1	LTE	2100	20	2	0	0	0.55		35.24195	Amphenol	CWT070X0	36	63	0.5		2	11.9	61;210		ON•
VZW B1	LTE	700	20	2	0	0	0.35		36.90286	Amphenol	CWT070X0	36	63	0.5		2	6.9	67.2;210		ON•
VZW C1	LTE	2100	20	2	0	0	0.55		35.24195	Amphenol	CWT070X0	36	63	0.5		2	11.9	61;330		ON•
VZW C1	LTE	700	20	2	0	0	0.35		36.90286	Amphenol	CWT070X0	36	63	0.5		2	6.9	67.2;330		ON•

StartSymbolData

Sym	Map Marke	Roof X	Roof Y	Map Label	Description (notes for this table only)
Sym		5	35	AC Unit	Sample symbols
Sym		14	5	Roof Access	
Sym		45	5	AC Unit	
Sym		45	20	Ladder	

Site Planning and Zoning Summary

The following outlines the zoning code requirements for new wireless antenna development in the PO (Professional Office) Zoning District relative to the application.

General Requirements (17.98.080)

17.98.080 - B: Restricted Zoning Districts: prohibited within 500 feet (and also 300 feet) of the following districts:

- Single-Family Residential
- Multi-Family Residential
- Mobile Home
- Commercial residential
- Parks and open space
- Public Facilities
- Transient rental use overlay

The proposal does not comply. Verizon's proposal is located on an existing two-story professional office building at 4400 Capitola Road, just 200 feet from multi-family residences (zoned PD) due south, roughly 300 feet from single-family residences (zoned R-1) and commercial retail (CR) zoned properties to the east, and 290 feet from residences (zoned RM-LM) to the north. The proposed site does not comply with the restricted zoning district setbacks.

17.98.080 – C: Restricted Coastal Areas – School Areas – Skilled Nursing Facility Areas: "absolutely prohibited in areas that lie within one thousand feet of the coastline [….] and five hundred feet of a school property or skilled nursing facility."

The proposal complies. The proposal is located roughly 2,000 feet from the coastline due south, zoned "Public Facility – Parks, Open Space" and is located over 1,500 feet from any school area or skilled nursing facility. However, the code also lists a more restrictive coastline setback of 1,000 feet. The proposal would not comply with the 1,000 foot standard.

17.98.080 – E: Compliance with FCC Regulations:

The proposal complies. The applicant submitted an engineering report verifying that they will comply with FCC regulations.

17.98.080 – F: Co-location: when feasible, co-location onto existing sites is required

The proposal complies. There are no existing nearby sites within Verizon's search area to co-locate on to. The applicant submitted a statement, saying they are open to other carriers co-locating on to this new site at 4400 Capitola Road.

17.98.080 – G: Visual Effect: facilities located so as to minimized their visual impact as much as possible

The proposal complies. Staff feels that the proposed antenna facility will have a minimal impact due to it being located on to an existing two-story building and since the antennas would only be two feet tall and screened with a canister (faux vent). The facility will be visible, but it will not be visually intrusive. The new equipment will mimic the design of a roof vent. There is a row of trees along Capitola Road that will shield the proposal from public view.

17.98.080 – H: Landscaping:

Not required. No major landscaping proposed to be added or removed with the roof-top antenna installation.

Location Standards (17.98.090)

17.98.090 – A: Location preferences:

1. Industrial or Commercial Sites
2. Attached to existing structures
3. Not highly visible from visually sensitive areas

The proposal does not comply. Although the proposed cell site complies with preferences 2 and 3, it does not comply with number 1. The site is proposed to be located on an existing office building.

17.98.090 – B: In no event may a wireless facility be located within three hundred feet of a restricted zoning district.

The proposal does not comply. The proposed Verizon antenna would be located on the roof of 4400 Capitola Road, just 200 feet from multi-family residences (zoned PD) due south and 290 feet from residences (zoned RM-LM) to the north. The proposed site does not comply with the restricted zoning district setbacks.

Preferred antenna siting and mounting techniques (17.98.100)

Techniques are listed in order of preference:

1. Façade-mounted
2. Roof-mounted
3. Ground-mounted
4. Freestanding monopole

The proposal does not comply. The proposal is for a new wireless facility on the roof top of an existing two-story building. Since it is not proposed to be façade-mounted, the proposal does not constitute the most preferred siting technique.

Roof-mounted wireless telecommunications facilities (17.98.120)

17.98.120 – A: Discouraged on residential building.

The proposal complies. The proposal would be located on an office building, not a residence.

17.98.120 – B: Shall not be allowed to affect scenic views.

The proposal complies. The proposal would be located along Capitola Road. The proposal would not significantly affect scenic views.

17.98.120 – C: Views shall be minimized from sensitive land uses.

The proposal complies. The proposed antennas would be two feet tall and would be screened within a canister. The proposal will not be a visual detriment to nearby residential uses.

17.98.120 – D: Visual impact shall be minimized.

The proposal complies. The two foot tall antenna proposal would project two feet-six inches above the existing roof line. The antennas will be screened within a canister structure and will be only slightly visible. There are existing trees along Capitola Road that would help screen the facility.

17.98.120 – E: Shall be painted with a non-reflective finish.

The proposal complies. Condition of Approval #6 has been included to ensure this.

17.98.120 – F: Shall be minimally visible from road right-of-ways.

The proposal complies. The proposal would be located on the roof-top of an existing two-story building. The proposed antennas will be slightly visible from Capitola Road, however an existing row of trees along Capitola Road will help screen the proposed facility.

17.98.120 – G: No structure may exceed 6 feet in height above roof line.

The proposal complies. The proposal antennas would be two feet-six inches above the existing roof line.

Setbacks and projections into yards. (17.98.150)

17.98.150 – A: Must meet setbacks of applicable zoning district.

The proposal complies. The proposal antenna facility and ancillary equipment is all located within the existing building footprint and comply with setback regulations of the PO (Professional Office) zoning district.

17.98.150 – C: Ground-mounted equipment shall not be readily visible from a major street.

The proposal complies. The only portion of the proposal which is ground-mounted is the equipment cabinet, which would be located behind the building away from Capitola Road.

Conclusion:

In summary, the proposed wireless antenna facility at 4400 Capitola Road does not comply with the setback restrictions of the Municipal Code. However, the proposal conforms to the design criteria listed within the code.

WIRELESS FACILITY FINDINGS

The following findings were prepared to demonstrate consistency of the proposed project with sections 17.98.080 through 17.98.120 of the Capitola Municipal Code.

17.98.080 General requirements.

A. All wireless communications facilities, except for exempt facilities described in Section 17.98.010, shall comply with all applicable goals, objectives and policies of the general plan/local coastal program, area plans, zoning regulations and development standards; the California Coastal Act; and are subject to the California Environmental Quality Act (CEQA).

- *General Plan Policy LU-1.2 Design Quality. Require all new development to feature high quality design that enhances the visual character of the community.*

Finding: The applicant has submitted photo simulations of the proposed rooftop antenna addition, which show the new equipment being very slightly visible from the adjacent Capitola Road thoroughfare. The equipment is conditioned to be painted with a non-reflective matte finish to ensure it blends well with the existing back drop. The new facility does not enhance the visual character of the community, but it also does not constitute a negative visual impact to the community. Although the new facility will be visible, it will not be visually intrusive. The new equipment will mimic the color and design of a roof top vent and is not located in a sensitive view corridor. The Planning Commission may condition the application to include additional screening materials.

- *Policy LU-4.7 Planning Projects. Ensure that future planning efforts for non-residential areas carefully consider potential impacts on adjacent residential neighborhoods.*

Finding: The planning review of the antenna facility carefully considered potential impacts on adjacent residential neighborhoods. Chapter 17.98.080 of the Capitola Municipal Code requires that new wireless antenna facilities be located a minimum of 500 feet from residential districts. In addition, chapter 17.98.090 states that the facility may "in no event less than three hundred feet" from residential districts. The proposed facility is located within the required 300 and 500 foot setback of residential properties; the facility would be just 200 feet from multi-family residences (zoned Planned Development) due south, roughly 300 feet from single-family residences, and 290 feet from residences (zoned Multi-Family Residential) to the north. The proposed site does not comply with the restricted zoning district setbacks. However, the applicant has claimed that the City's regulations are too restrictive and are thus prohibiting the carrier from filling a gap in their coverage. Verizon submitted a "significant gap" and "least intrusive means" analysis to prove this. The analysis showed that there is a gap in cell coverage and data capacity at this location has reached its limit, and that the proposed facility would constitute the "least intrusive means" of filling said gap.

- *Policy SN-4.3 Sensitive Receptors. Prohibit land uses and development that emit obnoxious odors, particulates, light, glare, or other environmentally sensitive contaminants from being located near schools, community centers, senior homes, and other sensitive receptors.*

Finding: Chapter 17.98.080 of the Capitola Municipal Code requires that new wireless antenna facilities be located a minimum of 500 feet from public facilities and residential districts. In addition, chapter 17.98.090 states that the facility may "in no event less than three hundred feet" from the restricted districts. Subsection C also requires a 500 foot setback from schools and nursing facilities. The proposal is located less than 3,000 feet from the beach due south, zoned "Public Facility – Parks, Open Space" but is located over 500 feet from any school area or skilled nursing facility. The facility would be just 200 feet from multi-family residences (zoned Planned Development) due south, roughly 300 feet from single-family residences (zoned Single-Family Residential) and Commercial Retail (CR) zoned properties to the east, and 290 feet from residences (zoned Multi-family Residential) to the north. The proposed site does not comply with the restricted zoning district setbacks. However, the applicant submitted a "significant gap" report and "least intrusive means" analysis which proved the necessity of this new site in filling a gap in their coverage.

According to Section 332(c) of the Communications Act, "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." Therefore, Radio Frequency (RF) emissions were not reviewed as a part of this application. Besides potential RF emissions, the project will not impact biological resources and sensitive habitat.

- *Policy ED-1.6 Expanded Services. Support the expansion of services and amenities that cater to both tourists and residents.*

Finding: The purpose of Verizon's proposed cellular antenna is to improve coverage and cell capacity in the area surrounding 4400 Capitola Road east of the Capitola Mall. Cell services are used by both tourists and residents.

- *Figure LU-6 – 4 "South 41st Avenue". Encourage residential serving commercial, residential uses, and mixed-use development to increase pedestrian activity and support local businesses.*

Finding: Although the project is located on Capitola Road, it is located within the "South 41st Avenue" district of the 41st Avenue / Capitola Mall Vision figure in the general plan. The purpose of Verizon's proposed cellular antenna is to improve coverage and cell capacity in the area surrounding 4400 Capitola Road east of the Capitola Mall. Improved cell services will support pedestrian activity and local businesses in the surrounding area, as a majority of the population uses cellular devices on a daily basis.

C.M.C. 17.98.080 - *B. Restricted Zoning Districts.*
Wireless communication facilities shall generally be allowed on parcels in nonresidential zoning districts. Wireless communication facilities are prohibited within or five hundred feet of the following zoning districts, subject only to exceptions as described in Section 17.98.080(D) of this section.

1. *Single-family residence (R-1);*
2. *Multiple family residence – Low medium (RM-LM);*
3. *Multiple family residence – Medium (RM-M);*
4. *Multiple family residence – High (RM-H);*
5. *Mobilehome exclusive (MHE);*
6. *Commercial residential (CR);*
7. *Parks and open space (P/OS);*
8. *Public facilities (PF);*
9. *Transient rental use overlay (TRO).*

Finding: The location of the proposed facility relative to setbacks from prohibited districts have been analyzed and considered by staff. The proposed facility is located within the required 500 foot setback of multi-family residential, single-family residential, and commercial retail. However, the applicant has claimed that the City's regulations are too restrictive and are thus prohibiting the carrier from filling a gap in their coverage, pursuant to section 17.98.080-D of the Capitola Municipal Code. Verizon submitted a "significant gap" and "least intrusive means" analysis to prove this. The analysis showed that there is a gap in cell coverage and available data capacity at this location and that the proposed facility would constitute the "least intrusive means" of filling said gap.

C. Restricted Coastal Areas – School Areas – Skilled Nursing Facility Areas.
To the extent that this subsection's coastline protection objective can be accomplished consistent with the Federal Communications Act of 1996 and any other applicable federal or state law, wireless communication facilities shall be prohibited in areas that lie within three thousand feet of the coastline. Wireless communication facilities shall be absolutely prohibited in areas that lie within one thousand feet of the coastline. Wireless communication facilities shall also be prohibited in areas that lie within five hundred feet of a school property or a skilled nursing facility that cares for patients on a long-term basis. No portion of a wireless facility shall extend onto or impede access to a public beach. The restrictions set forth in this subsection are subject to the exceptions set forth in subsection D of this section.

Finding: The proposed wireless facility would be located roughly 2,000 feet from the coastline; it would comply with the 1,000 foot regulation but not the 3,000 foot regulation. The proposed facility will be located over 500 feet from school areas and skilled nursing facilities. The proposal complies with the restricted school areas and nursing facilities, but not the coastal areas.

D. Exceptions to Restricted Areas.
Wireless communication facilities may be sited in the restricted zoning and coastal areas described above only in situations where the applicant can prove that:

1. The proposed wireless communication facility would eliminate or substantially reduce one or more significant gaps in the applicant carrier's network; and
2. There are no viable, technically feasible, and environmentally (e.g., visually) equivalent or superior potential alternatives (i.e., sites/facility types) outside the restricted zoning districts or coastal areas that could eliminate or substantially reduce said significant gap(s).

Finding: The proposed facility would be sited within restricted zoning areas. However, the applicant submitted a "significant gap" and "least intrusive means" analysis to prove that the subject location is necessary. The analysis showed that there is a gap in cell coverage and available data capacity at this location and that the proposed facility would constitute the "least intrusive means" of filling said gap.

E. Compliance with FCC Regulations.
Wireless communication facilities shall comply with all Federal Communication Commission (FCC) rules, regulations, and standards. Every two years the wireless telecommunications service provider shall submit to the director of community development: (1) a certification by a licensed engineer that the emissions are within the current FCC standards; and (2) a report on the level of cumulative radio frequency emissions within an eight hundred-foot radius from the subject antenna.

Finding: Condition # 5 been included to require compliance with FCC regulations. Every two years the applicant must submit documentation from a licensed engineer showing that emissions are within the current FCC standards.

F. Co-location.
Where technically, legally, and fiscally feasible, co-location of new wireless communication facilities onto existing telecommunication ground-mounted and freestanding monopole towers shall be required. Co-location may require that height extensions be made to existing towers or wireless telecommunications facilities to accommodate additional users, or may involve constructing new multi-user facilities that replace existing single-user capacity towers.

Finding: There are no existing cell sites within Verizon's proposed search ring, so co-locating on to an existing site is not an option. Verizon submitted a Collocation Statement as a part of their submittal package, which explains that they are open to other service providers collocating on this site as long as it is technically feasible. Verizon will cooperate with the City in the event of a future proposed collocation project.

G. Visual Effect. All proposed wireless telecommunications facilities shall be located so as to minimize their visual impact to the maximum extent feasible. Measures to achieve this objective may include but are not limited to the following:

1. The applicant shall use the smallest and least visible antennas feasible to accomplish the owners/operator's coverage objectives. All wireless telecommunications facilities proposed for locations where they would be readily visible from the public right-of-way or from the habitable living areas of residential units within one hundred feet shall incorporate appropriate techniques to camouflage or disguise the facility, and/or blend it into the surrounding environment, to the extent feasible.

Finding: Staff included Condition # 6 to require non-reflective finishing of equipment to ensure that the visual effect of the proposed wireless facility is minimized to the maximum extent feasible. Staff feels that the proposed antenna facility will have a minimal impact due to the antenna facilities being just two feet in height and it being proposed on an existing two-story building rooftop. The new facility will be slightly visible from Capitola Road, but will not be visually intrusive due to the existing line of trees separating the building from Capitola Road. The new equipment would mimic the design of an existing rooftop vent, and is not located in a sensitive view corridor.

2. Facilities shall be compatible in scale and integrated architecturally with the design of surrounding buildings or the natural setting. Wireless telecommunication facilities located on historic features (as defined in Chapter 17.87), a national or California registered historic building, or within a designated historic district, shall be limited to facade-mounted facilities only and integrated architecturally with the style and character of the structure or otherwise made unobtrusive. No wireless communications facility shall be sited such that its design and/or construction will damage an archeological site.

Finding: Staff included Condition # 6 to require non-reflective finishing of equipment to ensure that the visual effect of the proposed wireless facility is minimized and that the new antenna equipment will mimic the design of a rooftop vent. The building at 4400 Capitola Road is not considered an historic structure and the two foot tall antennas will not be visually intrusive.

3. Whenever possible, base transceiver stations, equipment cabinets and buildings, back-up generators, and other equipment associated with building-mounted antennas should be installed within the existing building envelope. If this is not feasible, the equipment shall be as low profile, screened, fenced, landscaped, painted, or otherwise treated architecturally to minimize its appearance from off-site locations and to visually blend with the surrounding natural and built environment. Equipment buildings should be designed in an architectural style and constructed of exterior building materials that are consistent with surrounding development and/or land use setting (if applicable) and should be a visually pleasing feature.

Finding: The proposed equipment cabinet will be located on the ground, adjacent to the south-eastern corner of the building and underneath the existing roof canopy. The equipment cabinet will not be visible from Capitola Road. Staff included Condition # 6 to require non-reflective finishing of equipment to ensure that the visual effect of the proposed wireless equipment is minimized.

4. All ground-mounted base transceiver stations, equipment cabinets, and utility panels for telecommunications facilities shall be limited to a maximum height of six feet above grade unless other techniques are adopted to ensure minimal visual impact. Base transceiver stations, equipment cabinets, and utility panels that are taller may be partially buried underground or installed by use of another technique to maintain the six foot height limit. Greater height may be granted upon a finding that it is not possible to meet the height limitation and that adequate screening of the equipment is provided.

Finding: The proposed equipment cabinet will be located on the ground, below the rooftop antennas. The equipment cabinet would be six feet-two inches tall, but will be located behind the existing building and will have a minimal visual impact. Staff has included Condition # 12 to require the equipment cabinet to be either partially buried or to be reduced in height to comply with the six foot height regulation.

5. No advertising signage or identifying logos shall be displayed on wireless telecommunications facilities, except for small identification plates used for emergency notification or hazardous or toxic materials warning.

Finding: Condition # 9 requires emergency contact signage. There is no other signage proposed with this application.

6. Applicants are encouraged to consider providing architectural treatments and to use "stealth techniques" to reduce potential visual impacts for all telecommunication facilities. Stealth techniques are especially encouraged in areas easily visible from a major traffic corridor or commercial center or in residential areas. Stealth techniques may be required as conditions of approval when determined to be necessary to mitigate adverse visual impacts. However, under no circumstances will "in wall" cell towers, i.e., cell towers constructed partially or wholly within the walls of a building, be permitted.

Finding: The proposal constitutes two, two-foot tall antennas that will extend two feet-six inches past the existing two-story roof line. The visual impacts from Capitola Road are very minimal due to the small size of the antennas, height of the existing building, existing tree canopy which screens the building from Capitola Road, and required non-reflective matte finish (per Condition # 6). Staff feels that further screening is not necessary.

7. All facilities shall be designed to be resistant to and minimize opportunities for unauthorized access, climbing, vandalism, graffiti, and other conditions that would result in hazardous conditions, visual blight, or attractive nuisances. The director may require the provision of warning signs, fencing, anti-climbing devices, or other techniques to prevent unauthorized access and vandalism when, because of their location and/or accessibility, antenna facilities have the potential to become an attractive nuisance. The design of the fencing and other access control devices shall be subject to design review.

Finding: Condition # 9 requires warning and safety signage and Condition # 10 requires that the facility to be maintained graffiti free. The proposed facility would be located on an existing rooftop, which will help restrict unauthorized access.

H. Landscaping. Landscaping may be required to visually screen wireless communications facilities from adjacent properties or public view and/or to provide a backdrop to camouflage the facilities. All proposed landscaping is subject to the director's review and approval. Landscaping guidelines include, but are not limited to, the following:
1. To the extent feasible, existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized. Additional trees and other vegetation shall be planted and maintained around the facility, in the vicinity of the project site, and along access roads in appropriate situations where such vegetation is deemed necessary to provide screening of wireless communications facilities and related access roads.
2. All trees used in landscaping shall be a minimum of fifteen gallons in size and all shrubs in a minimum of five gallons, unless otherwise approved.
3. Existing trees and other screening vegetation in the vicinity of the proposed facility and associated access-ways shall be protected from damage both during and after construction.
4. Where applicable, the applicant shall enter into a landscape performance and maintenance agreement with the city to ensure the installation and establishment of required landscaping. This agreement shall be secured by financial guarantees acceptable to the director in an amount equal to one hundred fifty percent of the estimated cost of materials and labor for required improvements. The duration of the landscape maintenance agreement shall be for the length of the permit.
5. All landscape design shall meet the water efficiency landscaping requirements of Chapter 17.97 of this title, including installing or upgrading existing irrigation systems if necessary.

Finding: There is no proposed landscaping modifications associated with this proposal. The proposed antennas are located on a rooftop, and the proposed equipment cabinet would be behind the building, away from Capitola Road. There is no landscaping proposed. The existing landscaping in between Capitola Road and the existing building at 4400 Capitola Road will provide screening for the proposed antennas. If the applicant later decides to remove landscaping, they must meet the above requirements.

I. Access Roads.
All wireless communications facilities shall use existing access roads, where available. Unless visual impacts can be adequately mitigated, no new access roads shall be allowed with any proposed wireless communications facility.

Finding: No new access roads are proposed therefore this criteria is not applicable.

J. Minor Modifications.
Minor modifications to wireless communications facility equipment design, location, height, and other elements may be allowed, subject to the approval of the director, if such modifications are in keeping with the architectural statement and layout design of the original approval, and meet the requirements of this chapter. (Ord. 862 § 1, 2003)

Finding: This proposal involves a new wireless site, not a modification to an existing facility. This criteria is not applicable.

17.98.080 Location standards.
A. Location preference for wireless communications facilities should be given to the following locations:

1. Industrial or commercial sites;
2. Facilities attached or sited adjacent to existing structures. Appropriate types of existing structures may include, but not be limited to, buildings, telephone and utility poles, signage and sign standards, traffic signals, light standards and flagpoles;
3. Sites that are not highly visible from adjacent roadways, public areas, parks, schools, or other visually sensitive areas, as determined by the director.

Finding: The applicant and staff have analyzed the preferred locations for wireless communications facility. The proposal is located upon an existing two-story office building, which is the second preferred location standard. The site would be visible from adjacent Capitola Road. Although the new two foot tall antennas will be slightly visible, it will not be visually intrusive. The new equipment will be painted with a non-reflective matte finish (Condition #6), and is not located in a sensitive view corridor. The proposal conforms to the location standards.

B. A wireless communications facility shall not be located in any non-residential zoning district unless the proposed facility is located as far away as is feasible from the property lines of restricted zoning districts as described in Section 17.98.080, as determined by the director and in no event less than three hundred feet.

Finding: The location of the proposed facility relative to setbacks from prohibited districts have been analyzed and considered by staff. The proposed facility would be located within the required 300 foot setback of restricted residential zones; the facility would be 200 feet from multi-family residences (zoned Planned Development) due south and 290 feet from residences (zoned Residential Multi-family Low-medium density) to the north. However, the applicant has claimed that the City's regulations are too restrictive and are thus prohibiting the carrier from filling a gap in their coverage. Verizon submitted a "significant gap" and "least intrusive means" analysis to prove this. The analysis showed that there is a gap in cell coverage and available data capacity at this location and that the proposed facility would constitute the "least intrusive means" of filling said gap.

C. When feasible and in conformance with other provisions of this chapter, wireless communications providers shall be encouraged to locate their wireless communications facilities on publicly owned or controlled property or right-of-way.

Finding: The applicant has proposed to locate the new wireless facility on private property, outside of the public right-of-way. Verizon explained that the nearby utility poles within the Capitola Road right-of-way would not be feasible to locate their facility on to.

D. Amateur radio facilities are prohibited on public property in any zoning district, unless the facility meets the requirements of Section 17.98.030(B) of this chapter. (Ord. 862 § 1, 2003)

Finding: This proposal does not constitute an "amateur radio facility", thus section D does not apply.

17.98.100 Preferred antenna siting and mounting techniques.
The following wireless telecommunications facilities and mounting techniques are listed in order of preference:

A. Facade-mounted facilities;
B. Roof-mounted facilities;
C. Ground-mounted facilities;
D. Freestanding monopole facilities. (Ord. 862 § 1, 2003)

Finding: The proposal is for roof-mounted facility. This is not the most preferred siting method, as the municipal code would prefer façade-mounted facilities.

17.98.120 Roof-mounted wireless telecommunication facilities.
A. Roof-mounted antennas are discouraged on residential buildings and are not allowed unless a finding can be made that no other reasonable alternative is available that meets the service requirements of the service provider.

Finding: The proposed roof-mounted facility would be located on an existing office building, not on a residential building.

B. Roof-mounted antennas shall not be allowed when they are placed in locations where they significantly affect scenic views. However, such facilities may be allowed with incorporation of appropriate stealth techniques.

Finding: The proposed new wireless facility would consist of two, two foot tall antennas on an existing roof top at 4400 Capitola Road. The proposal will not affect scenic views.

C. The height of roof-mounted wireless communications facility shall be based on a visual analysis demonstrating that views of the facility are minimized or are substantially screened from residential land uses, or other sensitive land uses such as parks, schools, or major streets, and on an engineering analysis justifying the height of the proposed wireless communications facility. The director may require an independent review, paid for in advance by the applicant, to evaluate the applicant's request. Factors to be considered are: whether or not another site exists where the standards can be met; whether there is another method of installation that would result in a project that complies with the standards; whether the addition of another wireless telecommunications facility would allow the reduction in height of the proposed facility; and whether there is any other technically feasible method of siting the facility that would reduce the height. If it is determined that the additional height is necessary, additional screening may be required to mitigate adverse visual impacts.

Finding: The proposed antennas would be two feet tall and would be screened within a metal canister. The proposal will not be a visual detriment to nearby residential and sensitive land uses.

D. All roof-mounted antennas shall be located in an area of the roof where the visual impact is minimized. Screening panels may be used to mitigate visual impacts but must be designed to blend with the architecture of the building in terms of scale, material and color. The cost to provide such screening of visual equipment shall not by itself provide justification to allow conspicuous equipment or antennas to remain visible.

Finding: The two foot tall antenna proposal would be centered within the existing building rooftop and would project two feet-six inches above the existing roof line. The antennas will be screened within a canister structure, painted with a non-reflective matte finish, and will be only slightly visible. There are existing trees along Capitola Road that would help screen the facility.

E. All roof-mounted facilities shall be painted with a non-reflective matte finish using an appropriate color that blends with the backdrop. The final choice of colors shall be determined by the community development department on a case-by-case basis, in accordance with this subsection.

Finding: This requirement is mandated through Condition of Approval #6.

F. Whenever feasible, all rooftop equipment installations shall be set back such that they are not viewed from the street. The equipment cabinets, base transceiver stations, cables and other appurtenant equipment, if located on the rooftop of buildings, shall be so located as to be minimally visible from public rights-of-way. Roof screening in compliance with this section may be required in cases where equipment is considered a visual impact.

Finding: The proposal would be located on the roof-top of an existing two-story building, setback over 20 feet from the front line of the building along Capitola Road. The proposed antennas will be slightly visible from Capitola Road, however an existing row of trees along Capitola Road will help screen the proposed facility. The equipment cabinet is proposed on the southern (back) side of the existing building, at ground level, and will not be visible from Capitola Road.

G. Notwithstanding any other provision of this section, no roof-mounted antennas, including support structures, shall exceed six feet in height above the parapet of the roof. (Ord. 862 § 1, 2003)

Finding: The proposed antenna structures project two feet-six inches past the existing roof line. The height limits are met.

STAFF REPORT

TO: PLANNING COMMISSION

FROM: COMMUNITY DEVELOPMENT

DATE: AUGUST 4, 2016

SUBJECT: **419 Capitola Avenue#16-101 APN: 035-131-26**

Design Permit and Variance for front and side yard setbacks for a three story duplex located in the CN (Neighborhood Commercial) Zoning District.
This project is in the Coastal Zone and requires a Coastal Development Permit that is appealable to the California Coastal Commission after all possible appeals are exhausted through the city.
Environmental Determination: Categorical Exemption
Property Owners: Daniel Gomez and Daniel Townsend, filed 5/16/2016
Representative: Daniel Gomez and Daniel Townsend

APPLICANT PROPOSAL

The application includes a design permit and variance to build a new three story duplex at 419 Capitola Avenue located in the CN (Neighborhood Commercial) zoning district. As proposed, the application requires a variance for front and side yard setbacks. The existing structure is a two story duplex with a garage on the bottom floor and two residential units within the second story. The existing structure would be demolished.

BACKGROUND

The applicant previously submitted a conceptual review for future redevelopment of the site. The conceptual review included four redevelopment concepts. On March 17, 2016, the Planning Commission provided comments and direction on the conceptual review application. Sheet A4.1 of the current application summarizes the four development concepts presented at the March 17th hearing. Options 2 and 3 were favored by the Planning Commission, with direction to further articulate the building through architectural details. The current application is based on option 2 of the conceptual review. The design extends the front of the building closer to the street and adds a new third story addition.

Architectural and Site Review

The above matter was reviewed by the Architectural and Site Review Committee on May 25, 2016. The following direction was provided to the applicant:

- Building Official Brian Van Son informed the applicant of the following requirements: base flood elevation needs to be determined by a licensed surveyor, a no rise study must be submitted, firewalls must be 1 hour rated, sidewalk and street cuts must comply with accessibility standards, and the Soquel Creek Water District will require an additional water meter.
- Public Works Representative, Danielle Uharriet outlined the necessary stormwater and sidewalk requirements.

- Local Architect, Frank Phanton had no concerns with privacy and thought the design incorporated good articulation.
- Local Landscape Architect, Megan Bishop requested that the applicant plant a couple trees.
- Senior Planner, Katie Cattan informed the applicant the utilities will be required to be underground to the nearest pole and required the applicant to submit a streetscape and shadow study.
- Local Historian, Carolyn Swift informed the applicant that the building is not historic.

SITE AND ZONING ANALYSIS

The following table outlines the zoning code requirements for development in the CN (Neighborhood Commercial) Zoning District relative to the application.

CN (Neighborhood Commercial) Development Regulations

Coastal		
Is project within Coastal Zone?		Yes
Is project within Coastal Appeal Zone?		Yes
Development Standards	**Existing**	**Proposed**
Use	Duplex	Duplex
Is CUP required?		No
Height: 27 ft		27’
Lot Area: There are no specific minimum lot area required except that there shall be sufficient area to satisfy any off-street parking and loading area requirements.		Complies
Lot Coverage: There shall be no specific maximum lot coverage, except as follows: A. Sufficient space shall be provided to satisfy off-street parking and loading area requirements, except that all parking may be provided within a structure. B. Front yard and open space requirements shall be satisfied.		Variance for front yard setback requested.
	Required	**Proposed**
Front Yard Setback: Allow for 15 foot landscape strip.	15 feet	2 feet, Variance Request
Side Yard Setback: 10% of the lot width for the first floor and fifteen percent of the lot width for the second floor.	10% of lot width for the 1st floor Lot Width: 28.50’ Setback: 3 feet 15% of the lot width for the 2nd floor 2nd floor setback: 4 feet	1st Floor: 0.5 feet **Variance Requested** 2nd Floor: 0.5 feet **Variance Requested**
Rear Yard Setback: 20% of lot depth.	20% of lot depth Lot depth: 53.25 feet Setback: 10.6 feet	11 feet
Parking	**Required**	**Proposed**
Dwellings, apartments and condominiums (townhouse) of more than four units, one covered space for each unit, plus one and one-half additional spaces on the site for each dwelling unit. Each regular space must be a minimum of nine feet by eighteen feet.	4 spaces required 2 covered	4 covered parking spaces **Complies**

Forty percent of the spaces may be compact spaces of eight feet by sixteen feet.		
Landscaping. Five percent of the lot area shall be landscaped to ensure harmony with adjacent development in accordance with architectural and site approval standards		491 sf Open Space **Complies**
Accessory Building		No
Underground Utilities – required with 25% increase area		Required

DISCUSSION

The property is within the block of Capitola Avenue that extends from the trestle to Blue Gum Avenue. The following unique development patterns exist within this block:

1. Property lines that are not at a right angle to the street.
2. Substandard lot depths. The lot depths are on average 50 feet deep rather than typical CN lots that range from 80 to 100 feet of depth.
3. The majority of structures do not comply with the zone setbacks, including the front yard setback.
4. The block is located in a highly visible gateway into the Village.

The property is currently developed with a two-story building with a garage on the bottom floor and two residential units on the second story. There is a deck on the second story. The existing structure does not comply with front and side yard setbacks. The proposed design maintains the non-conforming setbacks and intensifies the non-conformities by extending the building closer to the street.

Variance

The applicant is requesting a variance to allow the duplex to be built two feet from the front property line and within one foot of the side property line. Within the CN zone, the required front yard setback is 15 feet and the side yard is three feet on the first floor and 4 feet on the second floor.

Pursuant to Municipal Code chapter 17.66.090, the Planning Commission may grant a variance permit when it finds that there are special circumstances applicable to the subject property associated with the size, shape, topography, location, or surroundings of the property. As stated previously, this block of Capitola is unique in that the lots are substandard in size, property lines are not at right angles to the street, and the majority of development within the block does not comply with setback. The Planning Commission must also make findings that the grant of a variance would not constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone. Many of the surrounding properties already enjoy the privileges of decreased front and side yard setbacks.

Design

The new three-story building incorporates contemporary design features. The three-stories are differentiated through materials with stucco on the first story and aged ash horizontal siding on the second and third stories. A slightly recessed and angled bronze anodized waterjet cut panel extends above the entryway to the midpoint to the third story. The three foot wide panel will add a unique architectural detail that breaks the massing across the front elevation with the slight

recess and creates a defined look. Additional aluminum paneling will be incorporated into the side elevations toward the front of the building, again adding to the architectural features as viewed from Capitola Avenue. The building is further articulated with third story wall stepped 7 feet back with the incorporation of decks for each unit. The rear of the building includes a 1 ½ foot cantilever for a stair well creating a differentiation in the wall plane and break in the massing. All windows and doors are bronze anodized aluminum, including the garage door. Stained western cedar will be incorporated into the front wall plane of the third story.

CEQA REVIEW

Section 15303 of the CEQA Guidelines exempts new construction of duplex dwelling units in urbanized areas. This project involves the redevelopment of a duplex in the CN (neighborhood Commercial) Zoning District. No adverse environmental impacts were discovered during review of the proposed project.

RECOMMENDATION

Staff recommends that the Planning Commission **approve** application #16-101 and associated variance, based on the following Conditions and Findings for Approval.

CONDITIONS

1. The project approval consists of redevelopment of the existing duplex at 419 Capitola Avenue. The existing structure will be demolished and a new duplex will be built in its place. The first floor garage will be 960 square feet of unconditioned space. The second story is 904 square feet and the third floor is 710 square feet. The total enclosed square footage of the new building is 2,574 square feet. There is also 269 square feet of balcony proposed. A variance has been granted for front and side yard setbacks. The proposed project is approved as indicated on the final plans reviewed and approved by the Planning Commission on August 4, 2016, except as modified through conditions imposed by the Planning Commission during the hearing.

2. Prior to construction, a building permit shall be secured for any new construction or modifications to structures authorized by this permit. Final building plans shall be consistent with the plans approved by the Planning Commission. All construction and site improvements shall be completed according to the approved plans

3. At time of submittal for building permit review, the building plans must show that the existing overhead utility lines will be underground to the nearest utility pole.

4. At time of submittal for building permit review, the Conditions of Approval must be printed in full on the cover sheet of the construction plans.

5. At the time of submittal for building permit review, Public Works Standard Detail Storm Water Best Management Practices (STRM-BMP) shall be printed in full and incorporated as a sheet into the construction plans. All construction shall be done in accordance with Public Works Standard Detail Storm Water Best Management Practices (STRM-BMP).

6. Prior to making any changes to approved plans, modifications must be specifically requested and submitted in writing to the Community Development Department. Any significant changes to the size or exterior appearance of the structure shall require Planning Commission approval.

7. Prior to issuance of building permit, all Planning fees associated with permit # 16-101 shall be paid in full.

8. Prior to issuance of building permit, Affordable housing in-lieu fees shall be paid as required to assure compliance with the City of Capitola Affordable (Inclusionary) Housing Ordinance.

9. Prior to issuance of a building permit, the applicant must provide documentation of plan approval by the following entities: Santa Cruz County Sanitation Department, Soquel Creek Water District, and Central Fire Protection District.

10. Prior to issuance of building permits, a drainage plan, grading, sediment and erosion control plan, shall be submitted to the City and approved by Public Works. The plans shall be in compliance with the requirements specified in Capitola Municipal Code Chapter 13.16 Storm Water Pollution Prevention and Protection.

11. Prior to issuance of building permits, the applicant shall submit a stormwater management plan to the satisfaction of the Director of Public Works which implements all applicable Post Construction Requirements (PCRs) and Public Works Standard Details, including all standards relating to low impact development (LID).

12. Prior to any land disturbance, a pre-site inspection must be conducted by the grading official to verify compliance with the approved erosion and sediment control plan.

13. Prior to any work in the City road right of way, an encroachment permit shall be acquired by the contractor performing the work. No material or equipment storage may be placed in the road right-of-way.

14. During construction, any construction activity shall be subject to a construction noise curfew, except when otherwise specified in the building permit issued by the City. Construction noise shall be prohibited between the hours of nine p.m. and seven-thirty a.m. on weekdays. Construction noise shall be prohibited on weekends with the exception of Saturday work between nine a.m. and four p.m. or emergency work approved by the building official. §9.12.010B

15. Prior to a project final, all cracked or broken driveway approaches, curb, gutter, or sidewalk shall be replaced per the Public Works Standard Details and to the satisfaction of the Public Works Department. All replaced driveway approaches, curb, gutter or sidewalk shall meet current Accessibility Standards.

16. Prior to issuance of a Certificate of Occupancy, compliance with all conditions of approval shall be demonstrated to the satisfaction of the Community Development Director. Upon evidence of non-compliance with conditions of approval or applicable municipal code provisions, the applicant shall remedy the non-compliance to the satisfaction of the Community Development Director or shall file an application for a permit amendment for Planning Commission consideration. Failure to remedy a non-compliance in a timely manner may result in permit revocation.

17. This permit shall expire 24 months from the date of issuance. The applicant shall have an approved building permit and construction underway before this date to prevent permit expiration. Applications for extension may be submitted by the applicant prior to expiration pursuant to Municipal Code section 17.81.160.

18. The planning and infrastructure review and approval are transferable with the title to the underlying property so that an approved project may be conveyed or assigned by the applicant to others without losing the approval. The permit cannot be transferred off the site on which the approval was granted.

19. Upon receipt of certificate of occupancy, garbage and recycling containers shall be placed out of public view on non-collection days.

20. In any case where the conditions to the granting of a permit have not been or are not complied with, the community development director shall give notice thereof to the permittee, which notice shall specify a reasonable period of time within which to perform said conditions and correct said violation. If the permittee fails to comply with said conditions, or to correct said violation, within the time allowed, notice shall be given to the permittee of intention to revoke such permit at a hearing to be held not less than thirty calendar days after the date of such notice. Following such hearing and, if good cause exists therefor, the Planning Commission may revoke the permit.

FINDINGS

A. **The application, subject to the conditions imposed, secures the purposes of the Zoning Ordinance, General Plan, and Local Coastal Plan.**
Community Development Staff, the Architectural and Site Review Committee, and the Planning Commission have all reviewed the duplex. The project conforms to the development standards of the CN (Neighborhood Commercial) zoning district with the granting of a variance for front and side yard setbacks. Conditions of approval have been included to carry out the objectives of the Zoning Ordinance, General Plan and Local Coastal Plan.

B. **The application will maintain the character and integrity of the neighborhood.**
Community Development Staff, the Architectural and Site Review Committee, and the Planning Commission have all reviewed the project. The project as designed maintains the character and integrity of the neighborhood. The proposed addition with front entryway compliments the existing development pattern in the neighborhood.

C. **This project is categorically exempt under Section 15303of the California Environmental Quality Act and is subject to Section 753.5 of Title 14 of the California Code of Regulations.**
This project involves the redevelopment of a duplex in the CN (Neighborhood Commercial) Zoning District. Section 15303 of the CEQA Guidelines exempts construction of a duplex in an urbanized area.

D. **Special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of this title is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classification;**
The project is located in the a block of Capitola Avenue in which the majority of existing structures do not comply with setback due to substandard lot sizes.

E. **The grant of a variance permit would not constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which subject property is situated.**

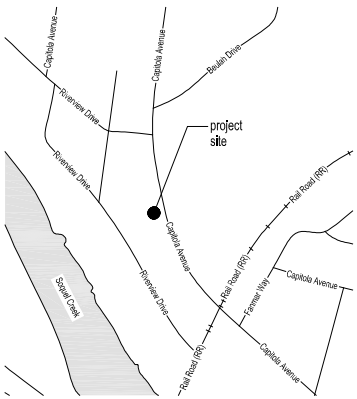
There are many properties within the same block of Capitola Avenue that do not comply with front and side yard setbacks.

ATTACHMENTS:

1. 419 Capitola Ave Plans

Prepared By: Katie Cattan
Senior Planner

Vicinity Map



Head South West on Riverview Avenue
Turn Right onto Capitola Avenue
Continue on Capitola Avenue
Arrive: 419 Capitola Avenue, Capitola, Ca on the Right.

Building Code

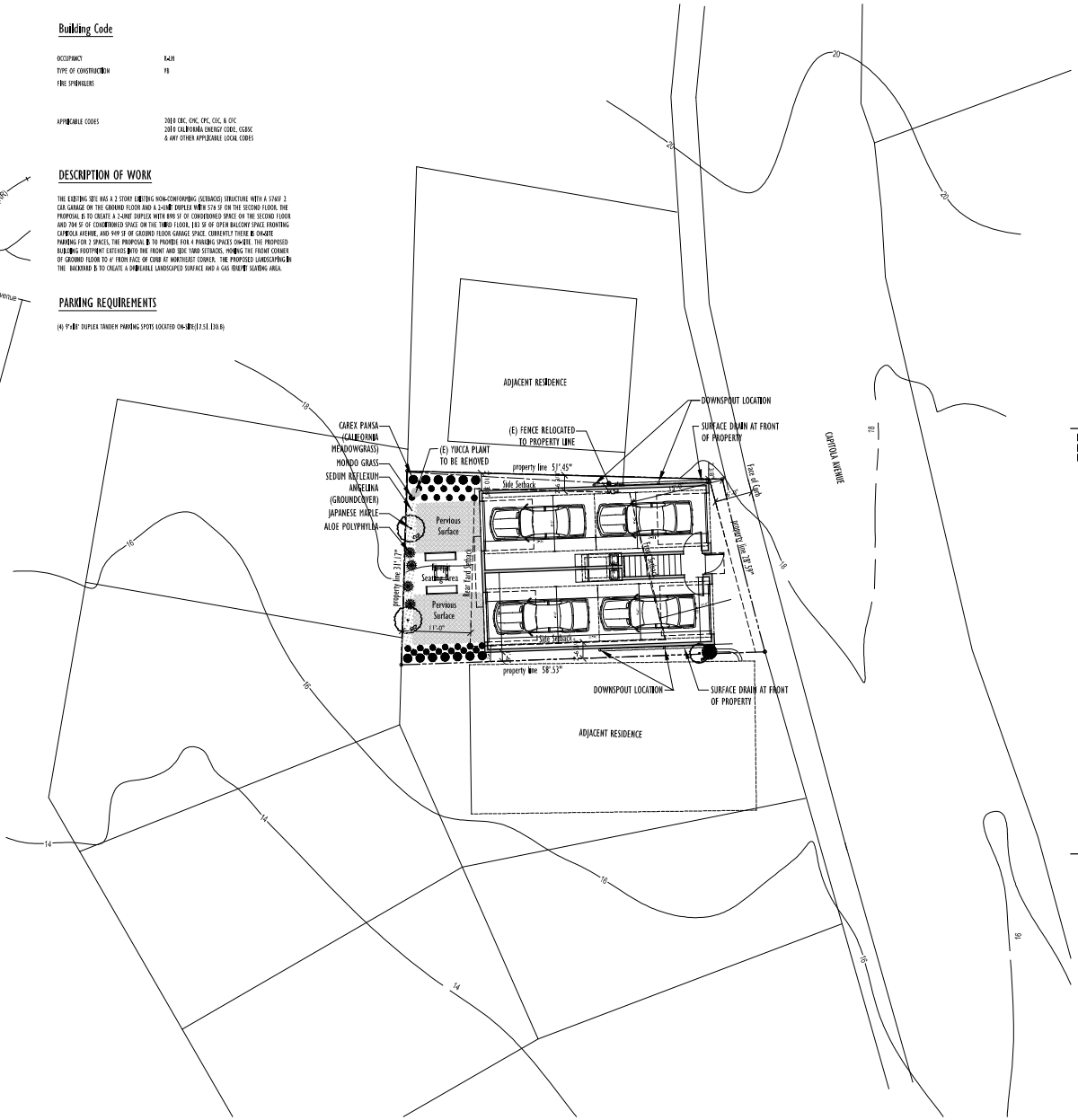
OCCUPANCY	R-3/U
TYPE OF CONSTRUCTION	VB
FIRE SPRINKLERS	
APPLICABLE CODES	2010 CBC, CMC, CPC, CEC, & CFC 2010 CALIFORNIA ENERGY CODE, CGBSC & ANY OTHER APPLICABLE LOCAL CODES

DESCRIPTION OF WORK

THE EXISTING SITE HAS A 2 STORY EXISTING NON-CONFORMING (SETBACKS) STRUCTURE WITH A STAFF 2 CAR GARAGE ON THE GROUND FLOOR AND A 2-UNIT DUPLEX WITH 576 SF ON THE SECOND FLOOR. THE PROPOSAL IS TO CREATE A 2-UNIT DUPLEX WITH 898 SF OF CONDITIONED SPACE ON THE SECOND FLOOR AND 704 SF OF CONDITIONED SPACE ON THE THIRD FLOOR, 183 SF OF OPEN BALCONY SPACE FRONTING CAPITOLA AVENUE, AND 949 SF OF GROUND FLOOR GARAGE SPACE. CURRENTLY THERE IS ONSITE PARKING FOR 2 SPACES, THE PROPOSAL IS TO PROVIDE FOR 4 PARKING SPACES ON-SITE. THE PROPOSED BUILDING FOOTPRINT EXTENDS INTO THE FRONT AND SIDE YARD SETBACKS, MOVING THE FRONT CORNER OF GROUND FLOOR TO 6' FROM FACE OF CURB AT NORTHEAST CORNER. THE PROPOSED LANDSCAPING IN THE BACKYARD IS TO CREATE A DRINKABLE LANDSCAPED SURFACE AND A GAS FIREPIT SEATING AREA.

PARKING REQUIREMENTS

(4) 9'x18' DUPLEX TANDEM PARKING SPOTS LOCATED ON-SITE (7.5.T.130.B)



STATISTICS

APN: 035-131-26
419 CAPITOLA AVENUE
CAPITOLA, CALIFORNIA 95010
ZONING: R-3/M
TOTAL SITE AREA: 3,585 S.F.

EXISTING IMPERVIOUS SPACE: 1,159 s.f.
PROPOSED IMPERVIOUS SPACE: 1,094 s.f.
TOTAL NEW IMPERVIOUS SPACE: -65 s.f.

EXISTING GROUND FLOOR UNCONDITIONED SPACE (GARAGE): 576 s.f.
EXISTING SECOND FLOOR SPACE: 576 s.f.
TOTAL : 1,152 s.f.

PROPOSED GROUND FLOOR UNCONDITIONED SPACE (GARAGE): 960 s.f.
PROPOSED SECOND FLOOR SPACE: 904 s.f.
PROPOSED THIRD FLOOR CONDITIONED SPACE: 710 s.f.
TOTAL : 2,574 s.f.

EXISTING BALCONY (OVER 12 INCHES ABOVE GRADE): 86 SF
PROPOSED BALCONY (OVER 12 INCHES ABOVE GRADE): 183 SF

PROPOSED PARKING: 4 SPACES
NO MAXIMUM COVERAGE REQUIRED

REQUIRED MAIN BUILDING SETBACKS: SIDE = 10% of lot width = 2.56'
SIDE 2ND STORY = 15% of lot width = 4.28'
REAR = 20% of lot depth = 11'
FRONT = 15' Landscape strip
HEIGHT LIMIT = 27'

ARCHITECT

Daniel Gomez
PH. 831.479.9295
FX. 831.479.9325

Fuse Architects Inc.
411 Capitola Avenue
Capitola, CA 95010
fuse@fusearchitecture.com

DRAWING INDEX

ARCHITECTURAL

419 RESIDENCE

LICENSED ARCHITECT
DANIEL J. GOMEZ
C-26000
04-30-17
Renewal Date
STATE OF CALIFORNIA

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831.479.9295 (V)
831.479.9325 (F)
www.fusearchitecture.com
fuse@fusearchitecture.com

fuse architects inc.

Principals
daniel gomez / architect
daniel townsend / architect

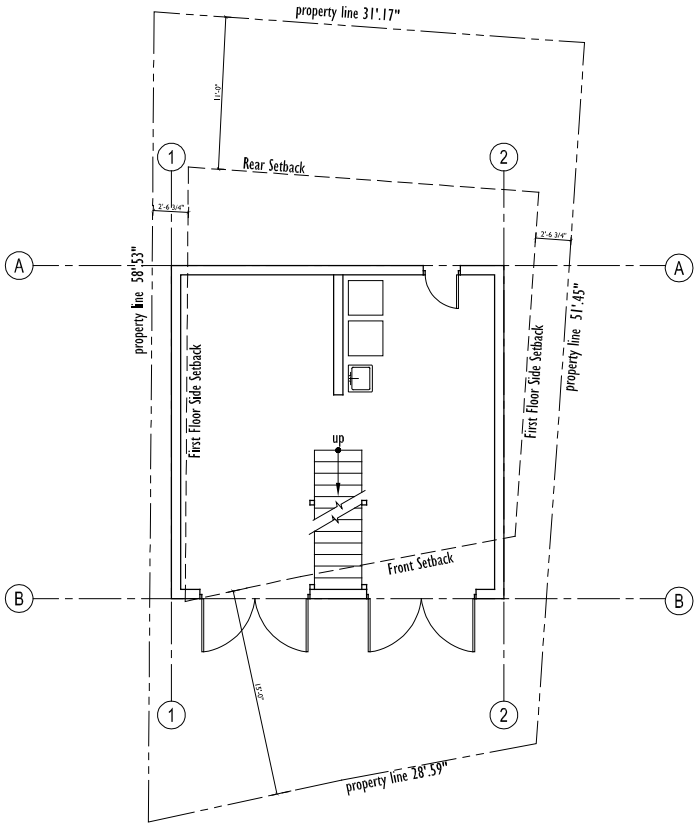
May 17, 2016

419 Residence

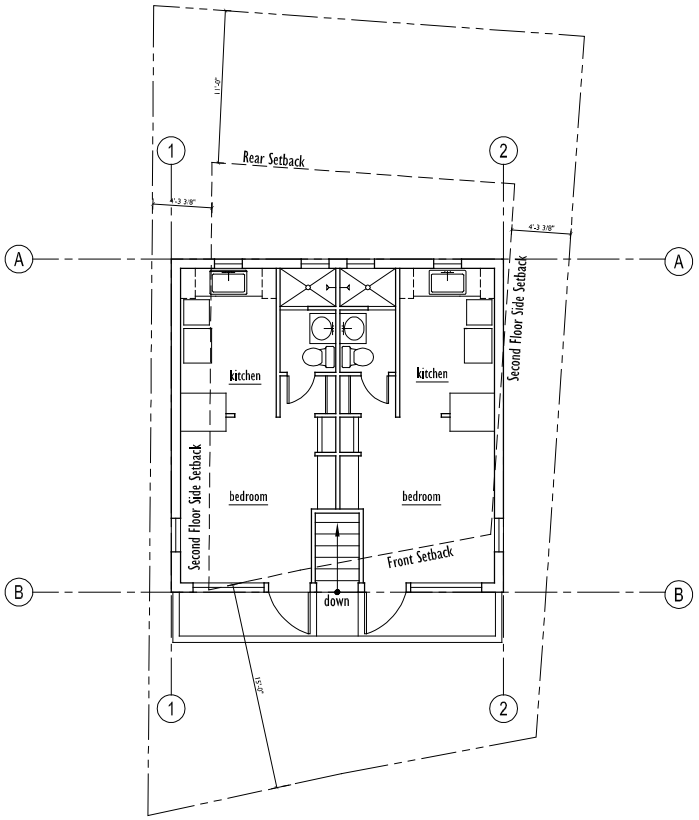
APN #: 035-131-26
419 CAPITOLA AVENUE, CAPITOLA, CALIFORNIA 95010

Project Data, Landscape & Site Plan

A1.1



EXISTING FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



EXISTING SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

419 RESIDENCE

LICENSED ARCHITECT
DANIEL J. GOMEZ
C-29000
04.30.17
Renewal Date
STATE OF CALIFORNIA

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Principals
daniel gomez / architect
daniel townsend / architect

May 11, 2016

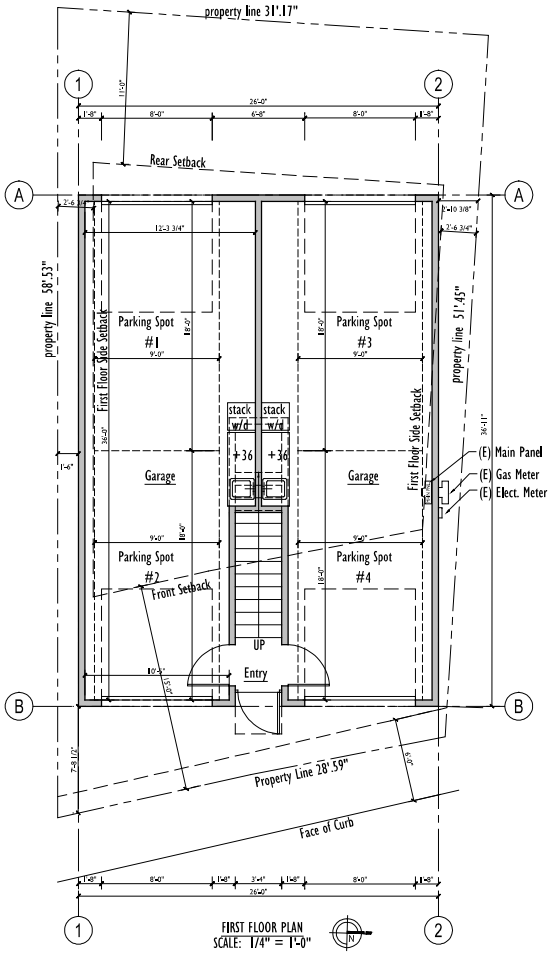
419 Residence

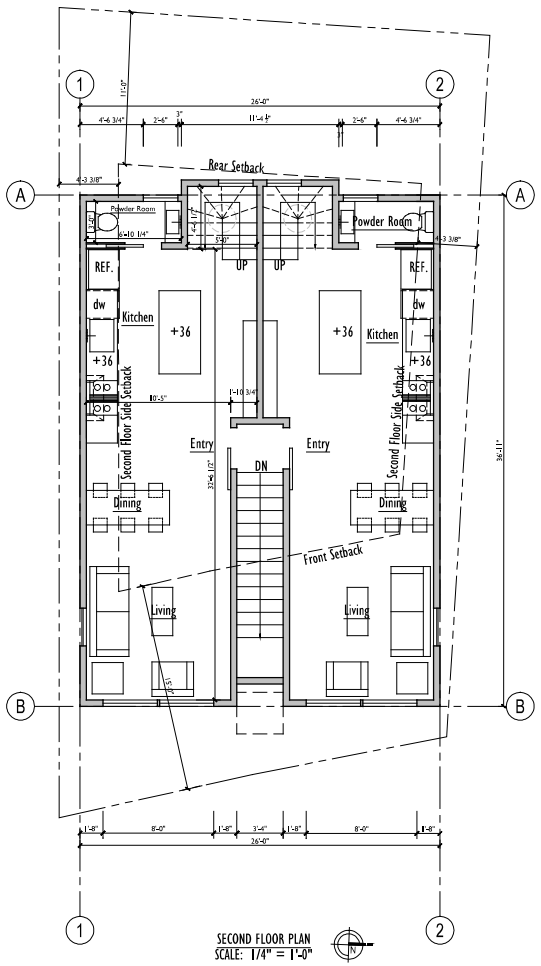
APN #: 035-131-26
419 CAPITOLA AVENUE, CAPITOLA, CALIFORNIA 95010

Existing Plans

A1.2

Attachment: 419 Capitola Ave Plans (1472 : 419 Capitola Avenue)





GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD (F.O.S.)
2. CONTRACTOR IS TO NOTIFY ARCHITECT OF ANY DIMENSIONAL DISCREPANCIES PRIOR TO CONSTRUCTION
3. CONTRACTOR IS TO COORDINATE DIMENSION DRAWINGS WITH STRUCTURAL DRAWINGS.
4. SMOOTH @ ALL INTERIOR WALLS
5. INSULATION MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR BARRIERS OR BREATHER PAPERS INSTALLED WITHIN FLOOR-CEILING OR ROOF-CEILING ASSEMBLIES, WALLS, CRAWL SPACES OR ATTICS, SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND SMOKE DENSITY RATING OF 450 WHEN TESTED IN ACCORDANCE WITH UBC STANDARD 8-1". SEC. 707.3
6. ALL EXTERIOR WALLS IN HOUSE TO BE 2X6 CONSTRUCTION. INTERIOR WALLS TO BE 2X4 OR 2X6 AS NOTED / ½" GYPSUM BD. TYP. (U.N.O.)
7. PROVIDE COMBUSTION AIR FOR THE WATER HEATER AND FURNACE. UMC SEC. 702
8. ALL WALLS @ TUB & SHOWERS TO BE SMOOTH, HARD, NONABSORBENT SURFACE (e.g. CERAMIC TILE OR FIBERGLASS) OVER A MOISTURE RESISTANT UNDERLAYMENT (e.g., W.R. GYP. BD.) TO A HEIGHT OF 70" ABOVE THE DRAIN INLET, PER CBC SECTION 807.1.3
9. ALL FIRE WALL AND CEILING ASSEMBLIES TO BE 1 HR RATED.
10. ALL UTILITIES TO BE BROUGHT IN UNDERGROUND.

419 RESIDENCE

LICENSED ARCHITECT DANIEL J. GOMEZ C-29000 04.30.17 Renewal Date STATE OF CALIFORNIA

fuse architects inc.
Principals
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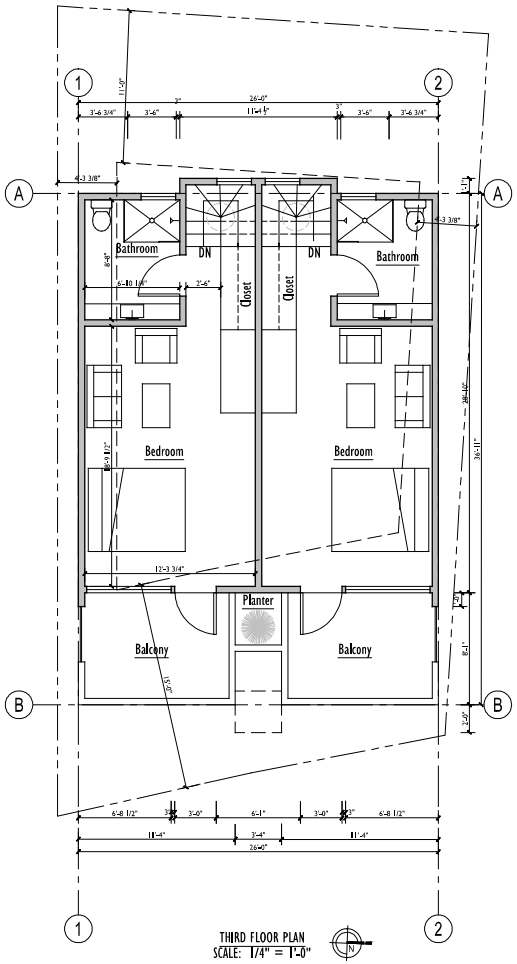
419 Residence

APN #: 035-131-26
419 CAPITOLA AVENUE, CAPITOLA, CALIFORNIA 95010

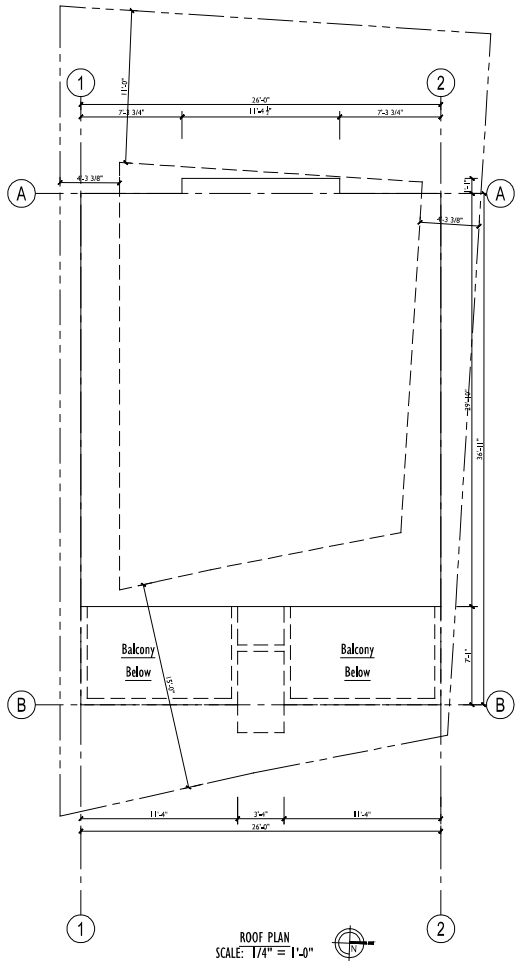
May 11, 2016

Proposed Floor Plans

A2.1



THIRD FLOOR PLAN
SCALE: 1/4" = 1'-0"



ROOF PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD (F.O.S.)
2. CONTRACTOR IS TO NOTIFY ARCHITECT OF ANY DIMENSIONAL DISCREPANCIES PRIOR TO CONSTRUCTION
3. CONTRACTOR IS TO COORDINATE DIMENSION DRAWINGS WITH STRUCTURAL DRAWINGS.
4. SMOOTH @ ALL INTERIOR WALLS
5. INSULATION MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR BARRIERS OR BREATHER PAPERS INSTALLED WITHIN FLOOR-CEILING OR ROOF-CEILING ASSEMBLIES, WALLS, CRAWL SPACES OR ATTICS, SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND SMOKE DENSITY RATING OF 450 WHEN TESTED IN ACCORDANCE WITH UBC STANDARD 8-1". SEC. 703.3
6. ALL EXTERIOR WALLS IN HOUSE TO BE 2X6 CONSTRUCTION. INTERIOR WALLS TO BE 2X4 OR 2X6 AS NOTED / ⅝" GYPSUM BD. TYP. (U.N.O.)
7. PROVIDE COMBUSTION AIR FOR THE WATER HEATER AND FURNACE. UMC SEC. 702
8. ALL WALLS @ TUB & SHOWERS TO BE SMOOTH, HARD, NONABSORBENT SURFACE (e.g. CERAMIC TILE OR FIBERGLASS) OVER A MOISTURE RESISTANT UNDERLAYMENT (e.g., W.R. GYP. BD.) TO A HEIGHT OF 70" ABOVE TIRE DRAIN INLET, PER CBC SECTION 807.1.3
9. ALL FIRE WALL AND CEILING ASSEMBLIES TO BE 1 HR RATED.
10. ALL UTILITIES TO BE BROUGHT IN UNDERGROUND.

419 RESIDENCE

LICENSED ARCHITECT
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C-29000
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Renewal Date
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daniel townsend / architect

419 Residence

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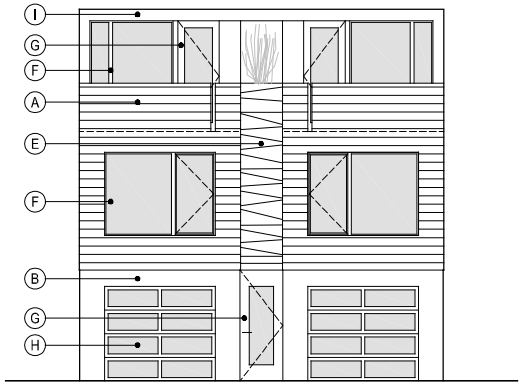
419 CAPITOLA AVENUE, CAPITOLA, CALIFORNIA 95010

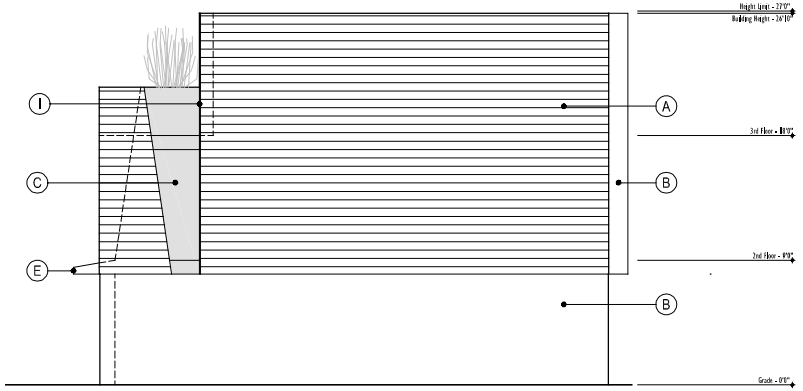
May 11, 2016

Proposed Floor Plans

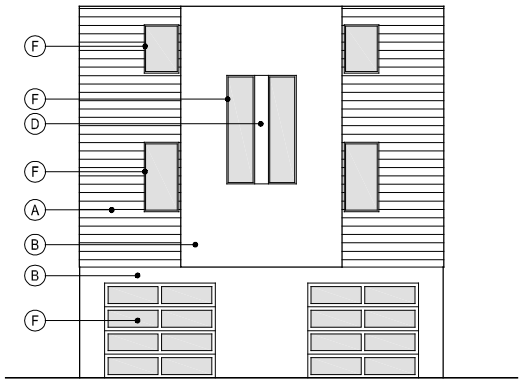
A2.2



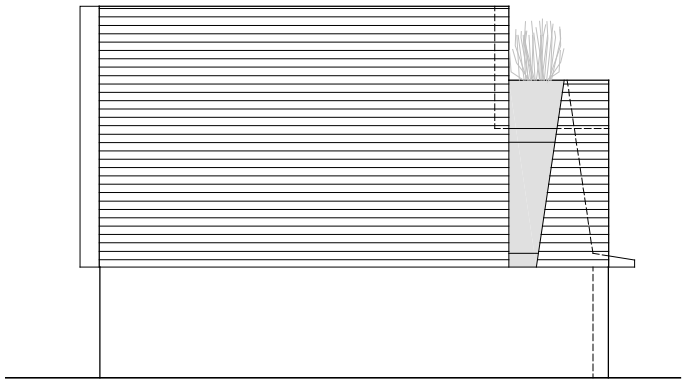
EAST ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

MATERIALS LEGEND

A - Trespa Pura Aged Ash

B - Painted Stucco (KMW47 Broken White)

C - Fixed Privacy Glass

D - Bronze Anodized Aluminum

E - Bronze Anodized Waterjet-Cut Panel

F - Bronze Anodized Aluminum Window

G - Bronze Anodized Aluminum Door

H - Bronze Anodized Aluminum Garage Door w/ White Laminated Glass Panels

I - Stained Western Red Cedar

PROPOSED ELEVATIONS

419 RESIDENCE

LICENSED ARCHITECT
DANIEL J. GOMEZ
C-26000
04.30.17
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419 Residence

APN #: 035-131-26
419 CAPITOLA AVENUE, CAPITOLA, CALIFORNIA 95010

May 17, 2016

Proposed Exterior Elevations

A3.1

STAFF REPORT

TO: PLANNING COMMISSION

FROM: COMMUNITY DEVELOPMENT

DATE: AUGUST 4, 2016

SUBJECT: **2205 Wharf Road #16-041 APN: 034-141-34**

Minor land division to create two lots of record, design permit for a new Single-Family Residence, and a tree removal permit for the property located at 2205 Wharf Road in the RM-LM (Residential Multi-Family – Low-Medium Density) Zoning District.
This project is not in the Coastal Zone and does not require a Coastal Development Permit.
Environmental Determination: Categorical Exemption
Property Owner: Christopher Wright
Representative: Dennis Norton, filed: 3/14/16

APPLICANT PROPOSAL

The application includes a minor land division to create two lots of record from a single lot of record. The applicant is also seeking a design permit for a new single-family home on the newly created lot located along Wharf Road. There is an existing triplex on the rear lot. A tree removal permit is also required for the removal of a deodar cedar tree. The project is located in the RM-LM (Multiple-Family Low Density) Zoning District.

BACKGROUND

On April 13, 2016, the Architectural and Site Review Committee reviewed the application.

- Committee Architect Frank Phanton had no concerns with the proposed design.
- Landscape Architect Craig Waltz was unable to attend the meeting.
- City Public Works representative Danielle Uharriet, explained that the project is a Tier 1 project and provided specific conditions of approval to be incorporated into the permit. A utility plan was also requested with existing and proposed utilities, a title report with utility easements, and status (public or private) for all utilities.
- City Building representative, explained separation requirements for fire.
- City Planner, Katie Cattan, requested that the applicant modify the existing deck to comply with setbacks to maintain compliance within the minor land division.

DISCUSSION

Subdivision

The applicant is proposing to subdivide the single 19,854 square foot lot of record into two lots (Attachment A). The minor subdivision will create a flag lot with shared driveway access. The

existing parcel is approximately 114 feet wide by approximately 180 feet deep. Due to existing development on the property, the applicant is proposing a front lot with a rear flag lot. The tentative parcel map identifies the rear lot as Parcel A and the front lot as Parcel B.

Lot Area and Dimensions
The follow table outlines the lot area and dimension requirements for development in the RM-LM Zoning District relative to the application:

Lot area and Dimensions	
Minimum lot area for a structure containing one or more dwellings units shall be 5,000 sf. Minimum lot width 50 feet; minimum lot depth 100 feet	
Code Requirements	**Proposed**
Lot Size: 5,000 sf minimum	Parcel A: 14,621 sf (triplex)
	Parcel B: 5,233 sf (single-family proposed)
Lot Width: 50 feet minimum	Parcel A: 80 feet
	Parcel B: 56 feet
Lot Depth: 100 feet minimum	Parcel A: 112 feet complies)
	Parcel B: 94 feet (6 ft less than standard)
Site Area Per Dwelling Unit	
RM-LM: 4,400 sf per dwelling unit	Parcel A: Triplex. 13,200 sf minimum
SF: 5,000 sf per dwelling unit	Parcel B: Single-Family. 5,000 sf minimum

The only requirement that is not satisfied in the application is the minimum lot depth of 100 feet for Parcel B. The applicant is requesting an exception to the 100 feet depth for the 94 foot deep parcel.

Subdivision Design Standards.
Subdivision applications are reviewed for compliance with Chapter 16 of the Municipal Code. The following analysis includes the underlined design standards for lots (§16.24.170) preceding staff analysis:

A. The size and shape of lots shall be in conformance to any zoning regulations effective in the area of the proposed subdivision. Staff Analysis: The subdivision complies with the minimum area per dwelling unit and minimum lot width. The applicant is requesting an exception to the 100 foot minimum lot depth to 94 feet.

B. The side lines of all lots, so far as possible, shall be at right angles to the street which the lot faces, or radial or approximately radial if the street is curved. Staff Analysis: The access is challenging from Wharf Road due to the significant change in grade. Therefore, shared driveway access is preferred for safety and to avoid excessive grading. The lots are at right angles to the shared driveway, not the street.

C. The Planning Commission may require that building set back lines shall be indicated by dotted lines on the subdivision map. Staff Analysis: The tentative map does not include the setback lines of the zone. All future development must conform to the setbacks established within the zoning district. The application includes the proposed development of a single-family home on the new lot. The existing triplex and new single-family home comply with the setbacks of the zoning district.

D. No lot shall be divided by a city boundary line. Staff Analysis: The entire property is located within the City of Capitola limits.

E. Lots without frontage on a dedicated public street of twenty feet or more will not be permitted. Staff Analysis: The applicant is proposing a flag lot. Parcel A has 20 feet of frontage on Wharf Road. Parcel B has 20 feet of frontage off the shared driveway, but not the dedicated street.

F. Lots other than corner lots may front on more than one street where necessitated by topographic or other unusual conditions. Staff Analysis: Not applicable.

G. In riparian corridors no lots may be created which do not contain adequate building area outside the riparian or stream setback. Staff Analysis: Not applicable.

RM-LM Development Standards Summary

Development of a single-family home in the RM-LM zone must comply with the development standards of the R-1 zoning district. The following table outlines the development standards of the R-1 zoning district relative to the proposed single-family home on Parcel B.

Use			
Proposed Use			Single Family
Principal Permitted or CUP?			Principally Permitted
Development Standards			
Building Height	**R-1 Regulation**		**Proposed**
	25'		25’
Floor Area Ratio (FAR)			
Lot Size			5,233 sq. ft.
Maximum Floor Area Ratio			49 % (Max 2,564 sq. ft.)
First Story Floor Area			1,164 sq. ft.
Second Story Floor Area			880 sq. ft.
Garage			436 sq. ft.
TOTAL FAR			2,480 sq. ft.
Yards			
	R-1 Regulation		**Proposed**
Front Yard 1st Story	15 feet		20 ft.
Front Yard Garage	20 feet		20 ft.
Side Yard 1st Story	10% lot width	Lot width 56 ft 5.7 ft. min.	8 ft.
Rear Yard 1st Story	20% of lot depth	Lot depth 94 ft 18.8 ft. min.	19 ft.
Encroachments (list all)	Rear and side yard decks on the ground level which are thirty inches or less above grade may encroach into the required setbacks; provided, that these features are setback at least three feet from the property line.		Deck in rear and side yard comply with height and 3’ setback requirement
Parking			
	Required		**Proposed**
Residential (from 2,001 up to 2,600 sq. ft.)	**3** spaces total **1** covered		**3** spaces total **2** covered

		1 uncovered
Underground Utilities: required with 25% increase in area		Required

RM-LM Development Standards

In establishing a minor land division, the existing conforming structure should maintain compliance with the development standards of the zone. The triplex located on proposed Parcel A, complies with all but one development standard of the RM-LM (Multi-family Low Density) zoning district with the proposed new property lines. An existing porch encroaches in to the side yard setback. The following table outlines the development standards of the RM-LM zoning district relative to the proposed minor land division.

Site Area per dwelling unit		
Lot Size		Parcel A: 14,644 sf
Minimum area per unit: 4,400 sf		4,400 sf per unit
Triplex		13,200 sf minimum
Development Standards		
Height	**30 ft**	23 ft
Lot Coverage	**40% (5,941 sf)**	2,535 sf
Front yard, First story	**15 ft**	25 ft
Front yard, Garage	**20 ft**	68 ft
Front Yard, Second Story	**15 ft + 2% of lot depth**	25 ft
Side Yard, First story	**10% of lot width (9ft minimum)**	9 ft
Side Yard, Second story	**12% of lot width (11' minimum)**	n/a
Encroachments	**Decks may encroach 2'**	Deck encroaches 4' 2' of deck to be removed.
Landscaping and Open Space		
Landscaping: Screen planting and additional landscaping shall be encouraged in all yard areas to insure privacy for all residents.		The private open space for each unit is defined by either a fence or a deck.
Usable open space: Not less than 50% of the required rear yard shall be developed as usable open space, fully landscaped and accessible to the residents of the structure on the site. The least dimension of this usable open space shall be fifteen feet. Fully developed roof terraces and roof gardens shall be allowed to provide up to one-half the area of usable open space.		The rear yard is shared usable open space for use by all tenants.
Private open space: Minimum private open space in the form of screened terraces, decks or balconies shall be provided as follows: 1. Not less than fifty percent of dwelling units shall be provided with individual open space; 2. Each private open space shall have a minimum area of forty-eight square feet, with a least dimension of four feet.		All units have private open space.
Parking		
	Required	**Proposed**
Triplex	**2** spaces per unit **1** covered	**9** spaces total **3** covered

	1 uncovered	**6** uncovered
Garage and Accessory Bldg.		
Garage		Complies
Accessory Building		N/A
Underground Utilities: required with 25% increase in area		N/A

Design Permit
2205 Wharf Road is in the Multi-Family, Low Density (RM-LM) zoning district. The street has a mix of housing types including single-family homes, secondary dwelling units, multi-family dwellings, and mobile homes. The proposed triplex and single-family home will complement the existing land uses in the nearby vicinity.

Currently, there is one existing triplex on parcel A. The structure is not listed on the 2005 City of Capitola Historic Structures List or the 1986 Capitola Architectural Survey. The triplex complies with all development standards of the RM-LM zone (lot coverage, height, open space, and parking) except for side yard setbacks. The existing deck on the side of the triplex will be reduced in size by two feet to comply with the required nine foot setback.

There is a significant change in grade of ten feet from street to the building pad of Lot B in the front and an additional 5 feet in grade to Lot A. The driveway will be repositioned slightly to accommodate Lot B, but overall follows the existing shape across the front of the property then curving to follow the side lot line to the existing home on the rear lot. Minor grading changes will take place for the driveway but excavation is limited.

The change in grade combined with the existing vegetation along Wharf Road creates privacy within the lot and natural screening from the street. The new single-family home will not have a presence along the street. Each of the residences is oriented toward the shared driveway rather than the street. This orientation is practical for the purpose of safe access and lack of visibility from Wharf Road.

The new single-family home is a two story residence in which the second story is setback from the first. The home will be finished with stained wood shingle siding and white wood trim. A 12-inch belly band will be painted white and visually separate the two stories. All windows and doors will have a four inch trim. The new home will have a redwood deck by the entrance and on the west side of the home around the existing coastal redwood tree.

There are six mature trees on the site. The owner is proposing to remove two trees due to proximity of the trees to the new home, one deodar cedar and one apple tree. A tree removal permit is required for the deodar cedar due the mature 30 inch diameter. Fruit trees do not require a tree removal permit. The owner plans to plant four white crape myrtle, multi-trunk trees between the driveway and the home. This is double the required replanting for a tree removal ratio of two plantings per one removal.

The landscape plan includes additional planting around the periphery of the property including a mix of grasses, perennials, and shrubs. Boulders will be placed within the landscape area in front of the new single-family home. A new six foot high fence is proposed along the rear property line.

Capitola Municipal Code 12.04.170 requires the construction of curb, gutter, and sidewalk on development projects except in areas deemed sidewalk exempt by the City. This property is not

located in a sidewalk exempt area. Currently, there are not sidewalks along this stretch of Wharf Road. Condition of approval #5 requires the owner enter into a deferred sidewalk agreement with the City to ensure construction of curb, gutter, and sidewalk at a future date.

CEQA REVIEW

Section 15315 of the CEQA Guidelines exempts minor land divisions in urbanized areas zoned for residential, commercial, or industrial use into four or fewer parcels when the division is in conformance with the General Plan and Zoning. No adverse environmental impacts were discovered during review of the proposed project.

RECOMMENDATION

Staff recommends the Planning Commission **approve** project application #16-041 based on the following Conditions and Findings for Approval.

CONDITIONS

1. The project approval consists of design permit for a new single family home and a minor land division at 2205 Wharf Road. The new single-family home is in the RM-M zone but is reviewed for compliance with the R-1 (single family) zoning district development standards. The maximum Floor Area Ratio for the 5,233 square-foot property is 49% (2,564 square feet). The total FAR of the project is 2,480 square-feet, compliant with the maximum FAR within the zone. The existing triplex on Parcel A, must remaining conforming with the development standards of the zone while subdividing the existing lot of record. As conditioned, the existing triplex will comply with all development standards of the RM-LM zoning district including maximum lot coverage, the front, rear and side yard setbacks, height, open space, and parking requirements. The proposed project is approved as indicated on the final plans reviewed and approved by the Planning Commission on August 4, 2016, except as modified through conditions imposed by the Planning Commission during the hearing.

2. The project consists of the subdivision of a 19,854 square foot lot into two residential lots at 2205 Wharf Road. The single parcel will be subdivided into two lots. The minor land division will create a flag lot with shared driveway access. The tentative map identifies the front lot as Parcel B and the rear lot as Parcel A. Parcel A will be 14,621 square feet and Parcel B 5,233 square feet.

3. Applicant shall have prepared a final parcel map by a registered civil engineer and shall submit the final map for review, approval, and recording by the City's surveyor and the Public Works Department. The parcel map shall include new legal descriptions.

4. Prior to recordation of the final parcel map, the deck on the existing triplex must be decreased in size to comply with the side yard setbacks.

5. Prior to recordation of the final parcel map, all plans and profiles of improvements shall be approved by the Director of Public Works and the construction of said improvements shall be in accordance with the City Specifications and shall be inspected by the Director of Public Works or his authorized agent, subject to fees appropriate for the services. Installation of a public sidewalk along Wharf Road is a required improvement. In lieu of installing this sidewalk the developer shall enter into a deferred improvement agreement with the City.

6. Prior to recordation of the final parcel map, a maintenance agreement and access easement for the shared driveway shall be recorded and referenced on the parcel map. The access easement must be reviewed and approved by the City attorney prior to recordation.

7. Available and necessary utilities, including CATV hookup facilities, with connections to each lot within the subdivision, shall be constructed in accordance with the utility's requirements. All utilities for lot A shall be underground.

8. Prior to construction, a building permit shall be secured for any new construction or modifications to structures authorized by this permit. Final building plans shall be consistent with the plans approved by the Planning Commission. All construction and site improvements shall be completed according to the approved plans.

9. At time of submittal for building permit review, the Conditions of Approval must be printed in full on the cover sheet of the construction plans.

10. At the time of submittal for building permit review, Public Works Standard Detail Storm Water Best Management Practices (STRM-BMP) shall be printed in full and incorporated as a sheet into the construction plans. All construction shall be done in accordance with Public Works Standard Detail Storm Water Best Management Practices (STRM-BMP).

11. Prior to making any changes to approved plans, modifications must be specifically requested and submitted in writing to the Community Development Department. Any significant changes to the size or exterior appearance of the structure shall require Planning Commission approval.

12. Prior to issuance of building permit, a final landscape plan shall be submitted and approved by the Community Development Department. Landscape plans shall reflect the Planning Commission approval and shall identify type, size, and location of species and details of irrigation systems, if proposed. Native and/or drought tolerant species are recommended.

13. Prior to issuance of building permit, all Planning fees associated with permit #16-041 shall be paid in full.

14. Prior to issuance of a building permit, the applicant must provide documentation of plan approval by the following entities: Santa Cruz County Sanitation Department, Soquel Water District, and Central Fire Protection District.

15. Prior to issuance of building permits, a drainage plan, grading, sediment and erosion control plan, shall be submitted to the City and approved by Public Works. The plans shall be in compliance with the requirements specified in Capitola Municipal Code Chapter 13.16 Storm Water Pollution Prevention and Protection.

16. Prior to issuance of building permits, the applicant shall submit a stormwater management plan to the satisfaction of the Director of Public Works which implements all applicable Post Construction Requirements (PCRs) and Public Works Standard Details, including all standards relating to low impact development (LID).

17. Prior to a project final, the applicant shall execute an Operation and Maintenance Agreement, for each lot, for the purpose of operating and maintaining the on-site stormwater improvements.

18. Prior to any land disturbance, a pre-site inspection must be conducted by the grading official to verify compliance with the approved erosion and sediment control plan. Erosion and sediment control shall be maintained throughout the duration of the construction project.

19. Prior to any work in the City road right of way, an encroachment permit shall be acquired by the contractor performing the work. No material or equipment storage may be placed in the road right-of-way.

20. During construction, any construction activity shall be subject to a construction noise curfew, except when otherwise specified in the building permit issued by the City. Construction noise shall be prohibited between the hours of nine p.m. and seven-thirty a.m. on weekdays. Construction noise shall be prohibited on weekends with the exception of Saturday work between nine a.m. and four p.m. or emergency work approved by the building official. §9.12.010B

21. Prior to issuance of a Certificate of Occupancy, compliance with all conditions of approval shall be demonstrated to the satisfaction of the Community Development Director. Upon evidence of non-compliance with conditions of approval or applicable municipal code provisions, the applicant shall remedy the non-compliance to the satisfaction of the Community Development Director or shall file an application for a permit amendment for Planning Commission consideration. Failure to remedy a non-compliance in a timely manner may result in permit revocation.

22. This permit shall expire 24 months from the date of issuance. The applicant shall have an approved building permit and construction underway before this date to prevent permit expiration. Applications for extension may be submitted by the applicant prior to expiration pursuant to Municipal Code section 17.81.160.

23. The planning and infrastructure review and approval are transferable with the title to the underlying property so that an approved project may be conveyed or assigned by the applicant to others without losing the approval. The permit cannot be transferred off the site on which the approval was granted.

24. Upon receipt of certificate of occupancy, garbage and recycling containers shall be shielded and placed out of public view on non-collection days.

FINDINGS

A. **The application, subject to the conditions imposed, will secure the purposes of the Zoning Ordinance, General Plan, and Local Coastal Plan.**
Community Development Department Staff and the Planning Commission have reviewed the project. The minor land division, together with the provisions for its design and improvement, is consistent with the objectives of the Zoning Ordinance, General Plan and Local Coastal Plan. The new single-family home comply with requirements of the zoning district

B. **The application is consistent with the Subdivision Map Act and local Subdivision Ordinance.**
The minor land division was designed in accordance with the Subdivision Map Act and local ordinances enacted pursuant thereto. Per the Subdivision Map Act, the proposed map is consistent with the General Plan and Local Coastal Plan, is physically suited for the proposed type and density of development, will not likely cause substantial environmental damage, or substantially and avoidably injure fish, wildlife or their habitats, will not cause serious public health problems, and will not conflict with public easements for access through, or use of, property within the proposed subdivision.

C. **This project is categorically exempt under Section 15315 of the California Environmental Quality Act and is not subject to Section 753.5 of Title 14 of the California Code of Regulations.**
Section 15315 of the CEQA Guidelines exempts minor land divisions in urbanized areas zoned for residential, commercial, or industrial use into four or fewer parcels when the division is in conformance with the General Plan and Zoning.

D. **The application will maintain the character and integrity of the neighborhood.**
Community Development Staff, the Architectural and Site Review Committee, and the Planning Commission have all reviewed the design of the single-family home. The structures fit within the built environment of the neighborhood. The neighborhood is characterized by a mix of residential densities including single family homes, secondary structures, multi-family homes, apartments, and mobile homes.

ATTACHMENTS:

1. 2205 Wharf Road Plans
2. 2205 Wharf Road Tentative Map
3. Arborist report 2205 Wharf Road

Prepared By: Katie Cattan
Senior Planner

W R I G H T

R e s i d e n c e

L O T B

CODE ANALYSIS LOT A

THESE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED IN COMPLIANCE WITH CALIFORNIA BUILDING AND FIRE CODES (2013)

OCCUPANCY CLASSIFICATION R-3/U

BUILDING CONSTRUCTION TYPE V-N

FIRE RATING: NON-SPRINKLERED

CODE ANALYSIS LOT B

THESE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED IN COMPLIANCE WITH CALIFORNIA BUILDING AND FIRE CODES (2013)

OCCUPANCY CLASSIFICATION R-3/U

BUILDING CONSTRUCTION TYPE V-N

FIRE RATING: SPRINKLERED

△

GENERAL INFORMATION

SITE AREA (LOT B): 5,233 SQ. FT.

ZONE: R-1-5

BUILDING:

PROPOSED (LOT B)		
MAIN LIVING	1,164	SQ. FT.
UPPER LIVING	880	SQ. FT.
SUBTOTAL	2,044	SQ. FT.
GARAGE	436	SQ. FT.
TOTAL	2,480	SQ. FT.

THE DESIGNER MUST BE NOTIFIED OF ANY DISCREPANCIES IN DIMENSIONS, FIELD CONDITIONS, OR OTHER INFORMATION THAT IS CONTAINED IN AND/OR DIFFERS FROM THESE DOCUMENTS.

△ LEGEND OF SHEETS

N O T E S

GENERAL:

1. PROJECT SHALL COMPLY WITH THE 2013 CALIFORNIA RESIDENTIAL BUILDING CODE, PLUMBING, MECHANICAL, ELECTRICAL, FIRE AND ENERGY CODES, 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE.
2. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES IN THE FIELD.
3. VERIFY THE STABILITY OF ALL ELEMENTS BEFORE DOING ANY WORK, AND PROVIDE SHORING, BRACING AND/OR SUPPORT AS REQUIRED.
4. VERIFY ALL GRADES AND DIMENSIONS IN FIELD. WRITTEN DIMENSIONS SHALL SUPERCEDE SCALED DRAWINGS. CONTACT DESIGNER IF ANY DISCREPANCIES EXIST.
5. CONTRACTOR SHALL REMOVE ALL DEBRIS PROMPTLY AND KEEP CONSTRUCTION SITE ORDERLY.
6. PLUMBING AND MECHANICAL PLANS WILL BE SUBMITTED BY THE CONTRACTOR.
7. NO PERSON MAY TAP INTO ANY FIRE HYDRANT FOR ANY PURPOSE OTHER THAN FIRE SUPPRESSION OR AID, WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE WATER SUPPLIER AND FROM COUNTY HEALTH DEPT.
8. ALL HOSES USED IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES SHALL HAVE A SHUT OFF NOZZLE. WHEN AN AUTOMATIC SHUTOFF NOZZLE CAN BE OBTAINED FOR THE SIZE/TYPE OF HOSE USED, PROVIDE AUTOMATIC SHUTOFF NOZZLE.
9. NO POTABLE WATER MAY BE USED FOR COMPACTION OR DUST CONTROL IN CONSTRUCTION ACTIVITIES WHERE THERE IS REASONABLY AVAILABLE RECLAIMED OR SUB-POTABLE WATER APPROVED BY THE COUNTY HEALTH DEPT.
10. ALL WORK AND CONSTRUCTION SHALL COMPLY WITH THE 2013 CALIFORNIA BUILDING CODE (CBC), AND ALL OTHER APPLICABLE BUILDING CODES, REGULATIONS AND SAFETY REQUIREMENTS.
11. PERMANENT PROPERTY CORNER HUBS ARE REQUIRED TO BE IN PLACE PRIOR TO FOUNDATION INSPECTION.

SITE:

1. FINISH GRADE SHALL SLOPE (MINIMUM 2%) AWAY FROM STRUCTURE.
2. ALL DISTURBED AREAS, NOT WITHIN LANDSCAPE PLAN, TO BE REVEGETATED WITH NATIVE GRASSES.
3. ALL MATERIALS CONTAINING GRASS, BRUSH, OR ROOTS SHALL BE STRIPPED PRIOR TO ANY GRADING OPERATIONS. THIS MATERIAL SHOULD BE STOCKPILED FOR LATER USE AS TOPSOIL.
4. TREES NOTED TO BE SAVED ARE TO BE PROVIDED PROTECTION BY FENCING OR OTHER MEANS DURING CONSTRUCTION.
5. "THE INSTALLATION FORM CF-6R AND THE CERTIFICATION OF INSULATION ARE REQUIRED TO BE POSTED AT THE JOB SITE DURING THE CONSTRUCTION PHASE OF THE PROJECT."
6. △ ALL HOUSE DRAINAGE TO SPLASHBLOCKS TO VEGETATED AREAS.
7. ALL SUBCONTRACTORS TO REVIEW AND SIGN CONSTRUCTION WASTE MANAGEMENT PLAN.

ENERGY REQUIREMENTS:

1. ALL EXTERIOR DOORS SHALL HAVE ALUMINUM OR WOOD THRESHOLD AND INTERLOCKING WEATHERSTRIP, UNLESS NOTED OTHERWISE.
2. JOINTS AND PENETRATIONS SHALL BE CAULKED AND SEALED.
3. DOORS AND WINDOWS SHALL BE CERTIFIED. ALL WINDOWS DOUBLE GLAZED EXCEPT WHERE NOTED OTHERWISE.
4. EXHAUST SYSTEM SHALL HAVE DAMPER CONTROLS.
5. HVAC EQUIPMENT SHALL HAVE SET BACK THERMOSTAT.
6. FIRST FIVE FEET OF PIPES CLOSEST TO WATER HEATER TANK SHALL BE WRAPPED WITH R-3 MIN'M.
7. HVAC EQUIPMENT, WATER HEATER, SHOWER HEADS AND FAUCETS SHALL BE CERTIFIED.
8. CONTRACTOR TO PROVIDE & POST ON THE STRUCTURE AT FINAL INSPECTION A COMPLETED INSULATION CERTIFICATE.
9. NFRC LABELS MUST REMAIN ATTACHED TO THE GLAZING UNTIL AFTERINSULATION INSPECTION IS COMPLETED.

FOUNDATION:

1. CONTRACTOR SHALL CAREFULLY EXCAVATE ALL MATERIALS NECESSARY, OF WHATEVER NATURE, FOR CONSTRUCTION OF THE WORK. ANY MATERIAL OF AN UNSUITABLE OR DELETERIOUS NATURE DISCOVERED BELOW THE BOTTOMS OF THE FOUNDATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH WORK.
2. GROUND ON WHICH GRADE BEAMS AND EXTERIOR CONCRETE FLATWORK ARE CONSTRUCTED MUST BE LIGHTLY PREMOISTENED BEFORE CONCRETE IS PLACED.
3. USE 2X6 PRESSURE TREATED SILLS OVER CONCRETE OR MASONRY FOUNDATION WALLS.
4. USE MINIMUM 5/8" X 10" A.B., AT 48" O.C., UNLESS NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE INSTALLED WITH METAL SLOTTED WASHERS (3" X 3" X 0.229"). FOUNDATION DETAILS SHALL SUPERCEDE GENERAL NOTES.
5. PROVIDE 18"X24" CRAWL ACCESS WITHIN 20'-0" OF ALL BATHROOMS AND PLUMBING CLEANOUTS. PROVIDE ADDITIONAL 18" ACCESS UNDER MAIN HEAT DUCT.
6. PROVIDE SIMPSON NO. 26 OR EQUAL 6"X14" FOUNDATION VENTS (2 S.F. PER 25 L.F.). PLACE AT MAX'M 8'-0" O.C. STARTING AS CLOSE TO CORNERS AS POSSIBLE AND LOCATED TO PROVIDE CROSS VENTILATION.
7. PROVIDE MIN'M 60 SQ. IN. FIXED VENTILATION PER CAR TO OUTSIDE AIR, 6" ABOVE GARAGE FLOOR.
8. CONCRETE SHALL DEVELOP 2500 PSI MIN'M COMPRESSIVE STRENGTH AT 28 DAYS. IN ACCORDANCE WITH THE PROVISIONS IN ACI 318, STANDARD PRACTICE FOR CURING CONCRETE,LATEST EDITION. ALL CONCRETE WORK SHALL CONFORM WITH THE APPLICABLE PROVISIONS, LATEST EDITION.
9. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 40 FOR #3 BARS AND SMALLER, AND GRADE 60 FOR #4 BARS AND LARGER. BARS SHALL BE WIRED TOGETHER AND LAPPED AT SPLICES A MINIMUM OF 40 BAR DIAMETERS IN CONCRETE AND MASONRY. WHERE PAIRS OF SINGLE LAYER HORIZONTAL BARS MEET AT CORNERS, HOOK ONE BAR TO LAP 40 BAR DIAMETERS WITH THE INTERSECTING BAR. ALTERNATELY, PROVIDE L BARS WITH EACH LEG 40 BAR DIAMETERS. SEE DRAWINGS FOR OTHER LAP REQUIREMENTS, WHERE NOTED. WHERE CONCRETE IS POURED AGAINST EARTH, PROVIDE 3" MINIMUM CONCRETE AROUND REINFORCED STEEL. CONCRETE COVER FOR OTHER CONDITION SHALL BE AS FOLLOWS :(1) ABOVE GRADE FORMED – 1 1/2" MIN. (2) BELOW GRADE-FORMED – 2" MIN. (3) OTHER – SEE STRUCTURAL PLANS.
10. PROVIDE NECESSARY HOLES THROUGH CONCRETE FOR ACCESS, PLUMBING, ETC. SEE FOUND. DET.
11. GARAGE SLAB TO BE FINISHED SMOOTH. ALL OTHER EXPOSED CONCRETE SLABS SHALL BE LIGHT BROOM FINISH, UNLESS NOTED OTHERWISE.
12. SLOPE GARAGE SLAB 1/4:12 TO OUTSIDE FOR DRAINAGE.
13. ALL DIMENSIONS ARE TO FACE OF CONCRETE FOR FOUNDATION FACE OF STUDS FOR FRAMING, U.N.O.
14. FRAMING ANCHORS AND STRAPS AND OTHER STANDARD FRAMING ACCESSORIES SHALL BE "SIMPSON" OR APPROVED EQUAL, OF THE DESIGNATION NOTED ON THE PLANS. ALL NAIL HOLES SHALL BE FILLED, AND NAILS SHALL BE OF THE SIZE AND LENGTH SPECIFIED AND/OR SUPPLIED BY THE MANUFACTURER, UNLESS NOTED OTHERWISE. WHEN INSTALLING OVER PLYWOOD, USE COMMON NAILS. JOIST AND BEAM HANGERS SHALL BE U-TYPE, EXCEPT AS NOTED. Z-MAX OR EQUAL AT PRESSURE TREATED WOOD.

FRAMING, FINISHES, ETC.:

1. ALL CONSTRUCTION SHALL CONFORM TO THE "GENERAL CONSTRUCTION REQUIREMENTS," THE "CONVENTIONAL CONSTRUCTION PROVISIONS" AND ANY OTHER SECTION OF 2013 C.B.C. UNLESS NOTED OTHERWISE IN THE PLANS OF THESE SPECIFICATIONS.
2. METAL FRAME CONNECTORS SHALL BE SIMPSON OR EQUAL. INSTALL PER MANUFACTURERS SPECIFICATIONS.
3. NAILS EXPOSED TO WEATHER OR P.T. WOOD SHALL BE GALVANIZED. USE COMMON TYPE NAILS U.N.O.
4. FLOOR JOISTS AND CEILING JOISTS TO BE SIDE LAPPED AND NAILED OVER TOP PLATES.
5. DOUBLE JOISTS UNDER PARALLEL PARTY WALLS.
6. PROVIDE RAFTER TIES (MIN'M. 1X6 @ 48" O.C.) IN LOWER THIRD OF ATTIC WHERE CEILING JOISTS ARE NOT PARALLEL TO RAFTERS.
7. ALL BOLTS THROUGH WOOD SHALL BE A DRIVE FIT WITH WASHER UNDER HEADS AND NUTS.
8. PROVIDE SOLID BLOCKING AT ENDS OF ALL JOISTS AND RAFTERS, OVER BEARING WALLS AND AT 8'-0" O.C. MAX. FOR 2X12 AND DEEPER MEMBERS.
9. ATTIC VENTILATION EQUALS MIN'M 1/150 OF AREA TO BE VENTED.
10. PROVIDE 22"X30" ATTIC ACCESS, WITH MIN'M 30" HEAD ROOM.
11. ALL EXTERIOR WALL COVERAGE SHALL BE APPLIED OVER MIN'M. 15 LB. BUILDING PAPER.
12. EXTERIOR STUCCO WALLS SHALL HAVE A 3 1/2" WEEP SCREED AT OR BELOW THE FOUNDATION PLATE LINE AND 4" MIN. ABOVE GRADE AND TWO LAYERS OF GRADE D PAPER OVER WOOD BASE SHEATHING. STUCCO TO BE APPLIED W/3 COAT APPLICATION.
13. PROVIDE DOUBLE RAFTERS AND HEADERS AT ALL SKYLIGHT OPENINGS.

15. OCCUPANCY SEPARATION BETWEEN GARAGE AND HOUSE SHALL BE A SELF-CLOSING, TIGHT FITTING, SOLID CORE DOOR 1 3/8" MIN. IN THICKNESS.
16. MINIMUM 6'-8" CLEARANCE REQUIRED FROM STAIR TREAD NOSING TO CEILING.
17. COMBUSTION AIR: PROVIDE 2 – 6"X14"-1/4" MESH VENTS 6" FROM FLOOR & 6" FROM CEILING.
18. SKYLIGHTS SHALL BE TEMPERED/INSULATED GLASS FOR GLAZED SKYLIGHTS
19. TUB ENCLOSURES SHALL BE FULLY TEMPERED GLASS, LAMINATED SAFETY GLASS OR APPROVED PLASTIC OF A SHATTER-RESISTANT TYPE.
20. INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SHALL PREVENT PASSAGE OF A 4" DIAMETER SPHERE; A LOAD OF 20 LBS. PER LINEAR FOOT APPLIED HORIZONTALLY TO THE TOP RAIL.
21. ALL FRAMING LUMBER SHALL BE GRADE STAMPED. ALL WALLS SHALL BE FRAMED WITH 2X4 STUDS @ 16" O.C. – UNLESS OTHERWISE SPECIFIED.
22. PLYWOOD SHALL BE APA RATED SHEATHING CONFORMING TO PSI-83, EXPOSURE 1 OF EXTERIOR, OF THE THICKNESS, GRADE AND/OR SPAN RATING NOTED ON THE DRAWINGS. LAY FACE GRAIN OF SHEETS PERPENDICULAR TO SUPPORTING MEMBERS OF HORIZONTAL DIAPHRAGMS. SHEETS MAY BE LAID WITH FACE GRAIN EITHER PERPENDICULAR OR PARALLEL TO SUPPORTING MEMBERS OF VERTICAL DIAPHRAGMS, PROVIDED THAT ALL SHEET EDGES ARE BLOCKED. PROVIDE ONE PLYCLIP AT THE CENTER OF ALL UNSUPPORTED SHEET EDGES ON ROOFS, UNLESS TONGUE AND GROOVE EDGES ARE USED.
23. PLYWOOD EDGE NAILING PER 2013 C.B.C., OR AS SPECIFICALLY NOTED) SHALL OCCURE AT ALL FRAMED OR BLOCKED SHEET EDGES AND AT OTHER LOCATIONS INDICATED ON THE PLANS AND DETAILS, WHETHER OR NOT SHEET EDGES OCCUR AT THESE OTHER LOCATIONS.
24. MICROLAM MEMBERS SHALL BE AS MUNUFACTURED BY TRUS JOIST, OR APPROVED EQUAL, IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: Fb=2600 psi, E=1,900,000 psi, CONFORMING TO NER-481.
25. GLU-LAMINATED BEAMS MANUFACTURED BY AN APPROVED FABRICATOR. CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED UNLESS NOTED, GLU-LAMS SHALL BE GRADE 24F-V4 FOR SIMPLE SPANS.
26. STUD WALLS HORIZONTAL BRIDGING SHALL BE INSTALLED IN ALL WALLS AND PARTITIONS WHERE STUDS ARE GREATER THAN EIGHT FEET IN HEIGHT. STUD WALLS SUPPORTING BEAMS SHALL HAVE POSTS OF THE SAME WIDTH UNDER BEARINGS UNLESS OTHERWISE NOTED.
27. WOOD SILLS SHALL BE ATTACHED TO CONCRETE FOUNDATIONS OR SLAB WITH 5/8" X 10" ANCHOR BOLTS @ 4'-0" O.C. MAXIMUM SPACING, EXCEPT AS NOTED OTHERWISE. THERE SHALL BE A MINIMUM OF TWO BOLTS, INCLUDING ONE BETWEEN 6" AND 10" FROM EACH ADJOINING PIECE. EXCEPT AS OTHERWISE NOTED.
28. DOUBLE PLATES SHALL LAP A MINIMUM OF 4'-0" AT SPLICES AND BE NAILED WITH NO LESS THAN #8-16d NAILS. ALL CUTS IN PLATES SHALL OCCUR OVER A STUD.
29. HOLES IN WOOD SILLS OR PLATES OF SHEAR OR BEARING WALLS SHALL BE PLACED IN THE CENTER OF THE PIECE AND SHALL BE NO GREATER IN DIAMETER THAN 1/3 THE WIDTH OF THE MEMBER. HOLES LARGER THAN NOTED ABOVE MAY BE BORED IN SILLS, PROVIDING THE SILL IS CONSIDERED CUT IN TWO AND ANCHOR BOLTS ARE PLACED ACCORDINGLY.
30. LINTELS OVER OPENINGS IN NON-BEARING WALLS SHALL BE SOLID MEMBERS THE WIDTH OF THE STUDS AND OF A MINIMUM NOMINAL DEPTH IN INCHES AT LEAST EQUAL TO THE SPAN LENGTH IN FEET. LINTELS IN BEARING WALLS SHALL BE AS NOTED ON THE PLANS.
31. CUTTING OF BEAMS AND JOISTS FOR PIPES SHALL BE NOT PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
32. ALL TIMBER FRAMING TO HAVE MOISTURE CONTENT OF 19% OR LESS @ THE TIME OF CONNECTION INSTALLATION

PLUMBING:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION (2013 C.P.C.) AND ALL APPLICABLE CODES AND LOCAL ORDINANCES.
2. SLOPE OF DRAINS 1/4"/FT. MIN'M. CLEARANCE FOR CLEANOUTS 18" MIN'M.
3. PROVIDE 12" SQ. ACCESS PANEL FOR ALL PLUMBING FIXTURES HAVING CONCEALED SLIP JOINT CONNECTIONS.
4. TOILET SHALL HAVE MAX. 1.28 GAL./FLUSH; SHOWER HEAD FLOW SHALL BE MAX. 2 GAL./MIN. AT 80 psi: WATER PRESSURE SHALL BE 50 psi MAX., FAUCETS SHALL BE MAX. 1.5 GPM.
5. PIPE MATERIALS:
   - A. WATER – COPPER TYPE "M" WITH LEAD FREE SOLDER
   - B. DRAINS – SCHEDULE 40 ABS
   - C. GAS – SCHEDULE 40 BLACK STEEL
6. FIREPLACE GAS OUTLET CONTROL VALVES SHALL BE LOCATED IN THE SAME ROOM AS THE OUTLET, OUTSIDE THE HEARTH, BUT NOT MORE THAN 4' FROM SUCH OUTLET.
7. ALL FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF 1.5 GPM @60 PSI.
8. KITCHEN SINKS, LAVATORIES, SHOWERS, BIDETS, LAUNDRY TUBS AND WASHING MACHINE OUTLETS SHALL BE PROVIDED WITH BOTH HOT & COLD WATER.
7. THE USE OF SOLDERS CONTAINING MORE THAN TWO-TENTHS OF 1 PERCENT LEAD IN MAKING JOINTS ON PRIVATE OR PUBLIC WATER SUPPLY SYSTEM IS PROHIBITED.
8. ALL HOT WATER FAUCETS THAT HAVE MORE THAN TEN FEET OF PIPE BETWEEN THE FAUCET SHALL BE EQUIPPED WITH A HOT WATER RECIRCUALATING SYSTEM. (SECTION 6(Q), ORD. 3522)
9. PROVIDE ACCESS PANEL (MIN. 12" X 12") OR UTILITY SPACE FOR ALL PLUMBING FIXTURES HAVING CONCEILED SLIP-JOINT CONNECTIONS.
10. PROVIDE 2X6 PLUMBING WALLS.
11. SHOWER AREA WALLS SHALL BE FINISHED WITH A NON-ABSORBENT SURFACE TO A HEIGHT OF 72" ABOVE DRAIN INLET. SHOWER & TUB WALLS TO BE A SMOOTH, HARD NON-ABSORBANT SURFACE OVER A MOISTURE RESISTANT UNDERLAYMENT (CEMENT, FIBER CEMENT, GLASS MAT GYPSUM, ETC) TO A HT. OF 72" ABOVE DRAIN INLET (NOT 70") PER CRC 307.2.
12. USE NON-REMOVABLE BACKFLOW PREVENTION DEVICES ON ALL HOSE BIBS. (UPC603)
13. WATER HEATERS SHALL HAVE A PRESSURE RELIEF VALVE W/DRAIN TO OUTSIDE.
14. SHOWER AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE. (MAX. 120F)
15. PROVIDE APPROVED NON-REMOVABLE BACKFLOW PREVENTION DEVICES ON HOSE BIBBS
16. PROVIDE 1" WATER LINE FROM METER TO WATER HEATER.
17. ALL BUILDING WATER SUPPLY SYSTEMS IN WHICH QUICK-ACTING VALVES (WASHING MACHINES, DISHWASHERS, ECT.) ARE INSTALLED, SHALL BE PROVIDED WITH DEVICES TO ABSORB HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES.
18. FERRUS GAS PIPES MUST BE ELECTRICALLY ISOLATED FROM THE REST OF THE GAS SYSTEM WITH A LISTED OR APPROVED ISOLATION FITTING INSTALLED A MIN. OF 6" ABOVE GRADE.

MECHANICAL:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH (2013 C.M.C.) AND ALL APPLICABLE CODES AND LOCAL ORDINANCES.
2. CLOTHES DRYER SHALL BE VENTED TO EXTERIOR OF BUILDING. ALL FACTORY MADE PRODUCTS TO BE INSTALLED TO INSTALLATION INSTRUCTIONS & STANDARDS, USE UL 181B TAPE.
3. BATHROOMS, TOILET COMPARTMENTS AND LAUNDRY ROOMS REQUIRING MECHANICAL VENTILATION SHALL HAVE A SYSTEM CAPABLE OF PROVIDING 5 AIR CHANGES PER HOUR.
4. SPARK ARRESTOR REQUIRED ON EACH FIREPLACE CHIMNEY AND SHALL HAVE MINIMUM AREA OF 4 TIMES NET FREE AREA OF CHIMNEY OUTLET.
5. CHIMNEYS SHALL EXTEND MIN. 2' ABOVE THE HIGHEST ELEVATION OF ANY PART OF THE BUILDING WITHIN 10' OF CHIMNEY. SECURE LAST SECTION OF METAL FLUE TO PREVENT LATERAL DISPLACEMENT.
6. STRAP WATER HEATERS TO WALL AND/OR FASTEN TO FLOOR TO RESIST LATERAL FORCES EQUAL TO 100% OF GRAVITY LOAD.
7. HEATING AND COOLIING EQUIPMENT LOCATED IN THE GARAGE WHICH GENERATES A GLOW, SPARK OR FLAME CAPIBLE OF IGNITING FLAMABLE VAPORS SHALL BE INSTALLED WITH PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR LEVEL.
8. ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MINIMUM OF 3'-0" FROM ANY OPENING INTO BUILDING
9. DUCTS PENETRATING THE SEPARATION SHALL BE CONSTRUCTED OF NOT LESS THAN 26 GAUGE GALAVANIZED STEEL AND BE CONTINUOUS WITHOUT OPENINGS OR NON-METALLIC CONNECTIONS
10. "DUCT CONNECTIONS TO BE WRAPPED WITH LISTED UL 181 TAPE IN ACCORDANCE WITH THE FOLLOWING."
    - A. ATTACH THE INNER CORE TO THE COLLAR WITH AT LEAST TWO WRAPS OF APPROVED DUCT TAPE AND SECURE WITH AN APPROVED CLAMP.
    - B. PULL JACKET AND INSULATION BACK OVER THE CORE AND USE TWO WRAPS OF APPROVED TAPE OR AN APPROVED CLAMP.
11. PIPING PENETRATIONS TO BE METAL INCLUDING PIPES EXPOSED IN THE GARAGE
12. AIR DUCTS INSTALLED UNDER A FLOOR IN A CRAWL SPACE SHALL BE INSTALLED SO AS TO MAINTAIN A VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES FOR ALL PORTIONS OF THE DUCT THAT WOULD OBSTRUCT ACCESS TO ANY PART OF THE CRAWL SPACE. C.M.C. SECTION 604.1.

ELECTRICAL:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF (2013 C.E.C.) AND ALL APPLICABLE CODES AND LOCAL ORDINANCES.
2. ALL 125 VOLT, SINGLE PHASE 15 AND 20 AMP RECEPTACLE OUTLETS INSTALLED OUTDOORS, IN GARAGES, IN BASEMENTS, IN BATHROOMS AND THE KITCHEN ABOVE COUNTER TOP SURFACE SHALL HAVE GROUND-FAULT CIRCUIT PROTECTION.
3. PLUMBING PIPELINES PROHIBITED FOR USE AS ELECTRICAL GROUND.
4. SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING. AND HAVE BATTERY BACK-UP. ONE SMOKE DETECTOR SHALL BE LOCATED IN EACH SLEEPING ROOMS & HALLWAY ON EACH FLOOR.
5. SERVICE CONDUCTORS SHALL HAVE A CLEARANCE OF NOT LESS THAN 3 FEET FROM WINDOWS, DOORS, PORCHES, FIRE ESCAPES OR SIMILAR LOCATION.
6. GENERAL LIGHTING IN KITCHEN AND BATHS SHALL BE L.E.D.
7. LIGHT FIXTURES ABOVE SHOWER/TUB SHALL BE WP RATED AND COMPLY WITH CODE
8. CONDUCTOR WIRES WITH AN INSULATED NEUTRAL AND A FOUR-PRONG OUTLET ARE REQUIRED FOR DRYERS AND COOKING UNITS.
9. RECEPTICALS AT FRONT & REAR OF HOME SHALL BE WATERPROOF & GFCI PROTECTED & MUST BE WITHIN 6'-6" OF GRADE.
10. PROVIDE GFI CIRCUITS AT GARAGE, KITCHEN, BATHS AND EXTERIOR.
11. LIGHT FIXTUES IN CLOSETS TO BE MINIMUM 12" FROM FACE OF SHELF IF INCANDESCENT, 6" IF FLUORESCENT OR RECESSED
12. ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED PER CEC 210.12(B).
13. KITCHEN CIRCUITS TO BE IN ACCORDANCE WITH CALIFORNIA ELECTRIC CODE
    - TWO 20-AMP SMALL APPLIANCE CIRCUITS SUPPLYING KITCHEN & DINING ROOM.
    - SEPARATE CIRCUIT FOR DISHWASHER.
    - SEPARATE CIRCUIT FOR DISPOSAL.
14. DISHWASHER RECEPTICLE MUST BE ACCESSIBLE. LOCATE UNDER KITCHEN SINK.
15. ALL BATHROOM RECEPTICLES TO BE SUPPLIED BY A DEDICATED 20AMP CIRCUIT WITH GFCI PROTECTION. CALIFORNIA ELECTRIC CODE ARTICLE 210-8 & 210-11(C)(3).
16. CENTRAL HEATING EQUIPMENT SHALL BE SUPPLIED BY AN INDIVIDUAL BRANCH CIRCUIT.
17. ALL LIGHTING / LUMINAIRES SHALL EITHER BE HIGH EFFICACY OR SHALL BE CONTROLLED BY AN OCCUPANT SENSOR IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS.
18. L.E.D. LIGHTING IN ALL HABITABLE ROOMS.
19. RECESSED LUMINAIRIES ARE REQUIRED TO BE LABELED FOR ZERO CLEARANCE INSULATIONCOVERAGE (IC) AND SHALL BE LABELED AIR TIGHT (AT).
20. ALL BATHROOM RECEPTICLES TO BE SUPPLIED BY A DEDICATED 20AMP CIRCUIT WITH GFCI PROTECTION. CALIFORNIA ELECTRIC CODE ARTICLE 210-8 & 210-11(C)(3).
21. ALL LAUNDRY ROOM RECEPTICLES TO BE SUPPLIED BY A DEDICATED 20AMP CIRCUIT.
22. NON FLUORESCENT LIGHTING IN KITCHEN MAY NOT EXCEED 50% OF THE TOTAL WATTAGE OF PERMANENTLY INSTALLED LIGHTING.

FIRE DEPARTMENT REQUIREMENTS

OCCUPANCY CLASSIFICATION R-3/U
BUILDING CONSTRUCTION TYPE V-B
SPRINKLERED

FIRE FLOW REQUIREMENTS FOR SUBJECT PROPERTY ARE A MINIMUM 1000 GALLONS PER MINUTE FROM ON HYDRANT LOCATED WITHIN 250 FEET.
EXISTING HYDRANT 1590 GPM

THESE PLANS ARE IN COMPLIANCE WITH CALIFORNIA BUILDING AND FIRE CODES (2013) AND DISTRICT AMENDMENTS.
DESIGNER/INSTALLER SHALL SUBMIT THREE SETS OF PLANS AND CALCULATIONS FOR THE UNDERGROUND AND OVERHEAD RESIDENTIAL AUTOMATIC FIRE SPRINKLER SYSTEM TO FIRE FOR APPROVAL.
SMOKE DETECTORS ARE TO BE INSTALLED ACCORDING TO CALIFORNIA BUILDING CODE AND APPROVED BY FIRE AGENCY.
BUILDING NUMBERS SHALL BE PROVIDED. NUMBERS SHALL BE A MINIMUM OF FOUR INCHES IN HEIGHT ON A CONTRASTING BACKGORUND AND VISIBLE FROM THE STREET.
INSTALL AN APPROVED SPARK ARRESTER ON THE TOP OF CHIMNEYS. THE WIRE MESH SHALL NOT EXCEED 1/2 INCH.
ROOF COVER SHALL BE NO LESS THAN CLASS "B" RATED ROOF.
A 30-FOOT CLEARANCE WILL BE MAINTAINED WITH NON-COMBUSTIBLE VEGETATION AROUND ALL STRUCTURES OR TO THE PROPERTY LINE WHICHEVER IS A SHORTER DISTANCE.
THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON SITE DURING INSPECTIONS.
FIRE HYDRANT SHALL BE PAINTED IN ACCORDANCE WITH THE STATE OF CALIFORNIA HEALTH AND SAFETY CODE. SEE JURISDICTION REQUIREMENTS.
DRIVEWAY SHALL HAVE IN PLACE (ALL WEATHER SERVICE) PRIOR TO ANY FRAMING CONSTRUCTION.
THE DRIVEWAY SHALL HAVE AN OVERHEAD CLEARANCE OF 14 FEET VERTICAL DISTANCE FOR ITS ENTIRE WIDTH.
AS A CONDITION OF SUBMITTAL OF THESE PLANS, THE OWNER AND INSTALLER CERTIFY THAT THESE PLANS ARE DETAILS COMPLY WITH APPLICABLE SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AGREE THAT THEY ARE SOLELY RESPONSIBLE FOR COMPLIANCE WITH SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AND FURTHER AGREE TO CORRECT ANY DEFICIENCIES NOTED BY THIS REVIEW, SUBSEQUENT REVIEW, INSPECTION OR OTHER SOURCE, AND, TO HOLD HARMLESS AND WITHOUT PREJUDICE, THE REVIEWER AND REVIEWING AGENCY.
DRIVEWAY WILL BE 14 FEET WIDE WITH A MAXIMUM SLOPE OF 8%. WITH A SOIL COMPACTION OF 95%. DRIVEWAY . SEE SITE PLANS FOR DRIVEWAY.

EROSION CONTROL NOTES

1. No land clearing, grading, or excavation shall be done between October 15th and April 15th. Any deviation from this condition requires review and approval of a separate winter erosion control plan by Environmental Planning prior to beginning such construction. The developer shall be responsible for implementing and maintaining site erosion control at all times.
2. Unnecessary grading and distributing of soil shall be avoided. (Total excavation 20 yards.)
3. Between October 15th and April 15th exposed soil shall be protected from erosion at all times. Hay bales, filer berms, silt fences or other means shall be employed to prevent sediment from leaving the site or entering any watercourse.
4. During construction, no turbid water shall be permitted to enter the channel or storm drain system. Use of silt and grease traps, filter berms, hay bales or silt fences shall be used to prevent such discharge.
5. All areas on- and off-site exposed during construction activities, if not permanently landscaped per plan, shall be protected by mulching and/or planting of the following SCS approved erosion control mix at a rate of 35 lbs per acre.

Blando Brome	50%
Rose Clover (pellet inoculated)	35%
Creeping Red Fescue	15%
Zorro Annual Fescue	Trace
Wildflowers	Trace

6. All excavated material shall be removed to an approved S.C. County disposal site or disposed of on-site in a manner that will not cause erosion.
7. Any material stockpiled on-site shall be covered with plastic, especially during the winter months or during periods of rain.
8. Upon completion of construction, all remaining exposed soils shall be permanently revegetated per landscaping plan.
9. Exposed soil on slopes greater than 20% shall be seeded, covered with 2 inches of straw, and an erosion control blanket. The erosion control blanket shall be staked in place.
10. It is the developer's responsibility to see that additional measures, necessary to control site erosion and prevent sediment transport off-site are implemented.
11. Roof & site drainage to percolate to lot area, unless noted. Downspouts to splashblocks to surface drain to established landscape areas.

REVISIONS:	BY:
△ 07/05/16	GG

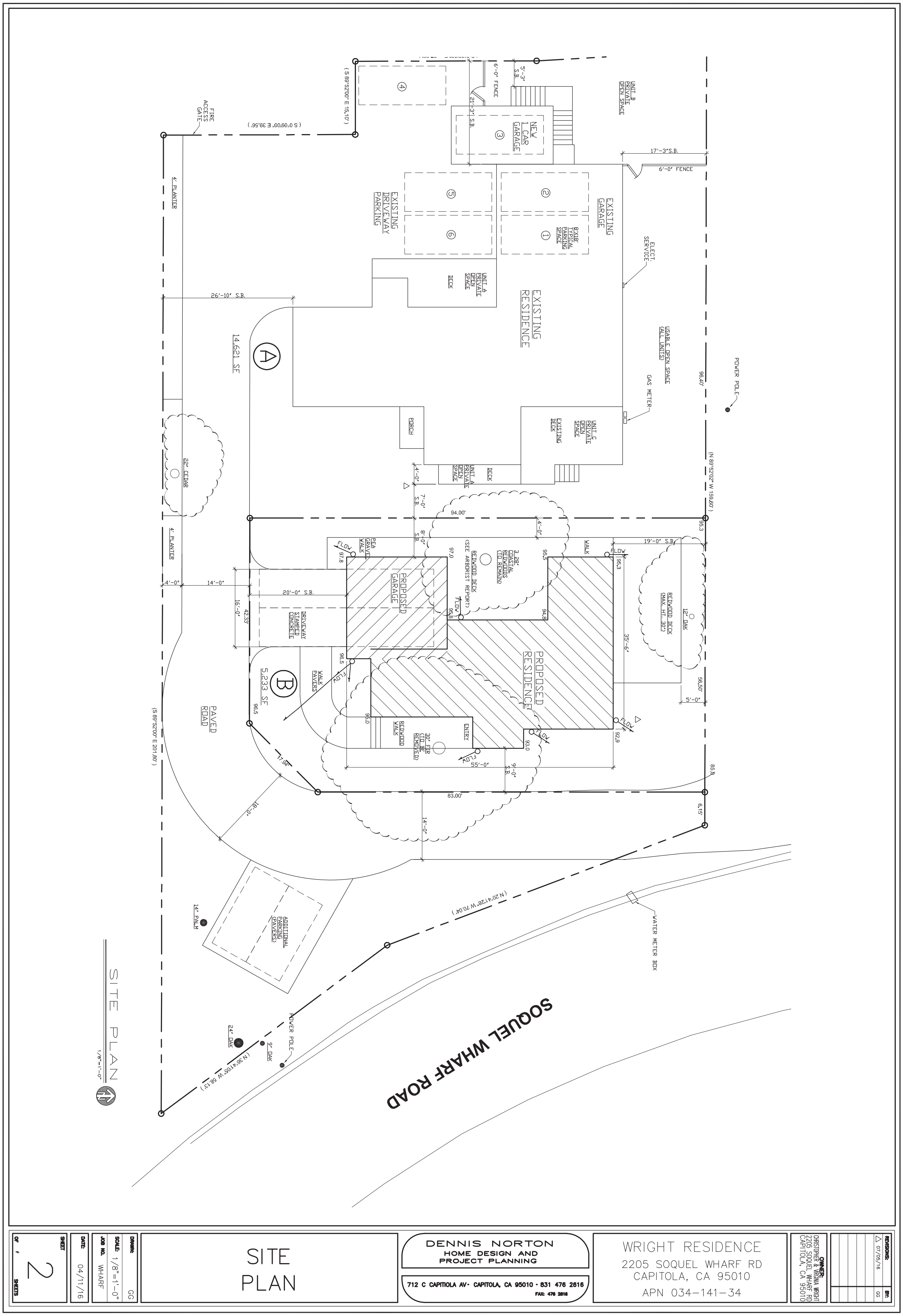
OWNER:
CHRISTOPHER & VIRGINIA WRIGHT
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010

WRIGHT RESIDENCE
2205 SOQUEL WHARF RD LOT B
CAPITOLA, CA 95010
APN 034-141-34

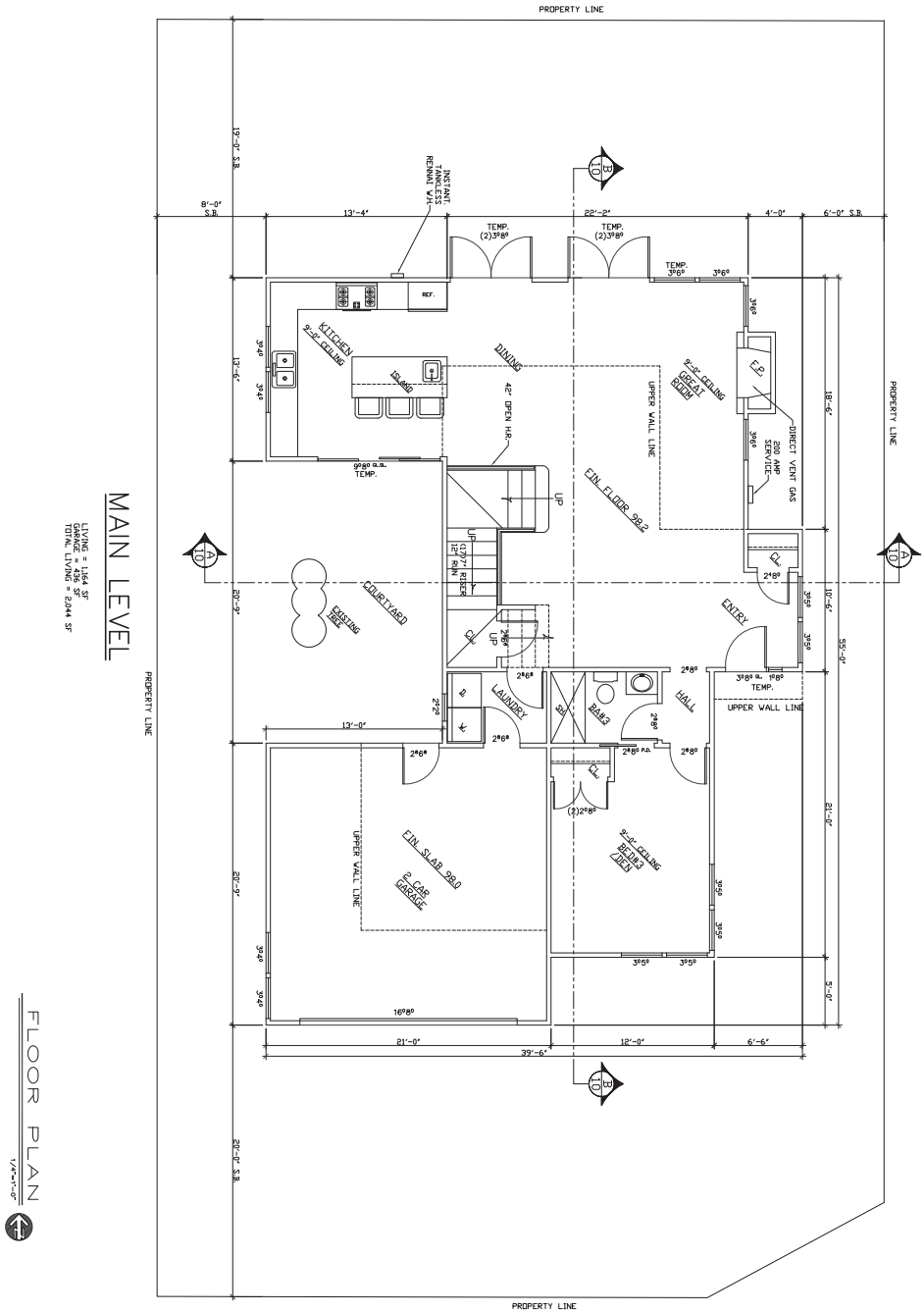
DENNIS NORTON
HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA AV.-CAPITOLA, CA 95010 831 476 2616
FAX: 476 2616

COVER SHEET
LEGEND OF SHEETS

DRAWN: GG
CHECKED:
JOB NO. WHARF B
DATE: 04/08/16
SHEET 1
OF # SHEETS


SITE PLAN
1/8"=1'-0"
SOQUEL WHARF ROAD
EXISTING RESIDENCE
EXISTING GARAGE
EXISTING DRIVEWAY PARKING
NEW 1 CAR GARAGE
PROPOSED RESIDENCE
PROPOSED GARAGE
DRIVEWAY STAMPED CONCRETE
PAVED ROAD
14,621 SF
5,233 SF
ADDITIONAL PARKING (PAVERS)
FIRE ACCESS GATE
POWER POLE
WATER METER BOX
GAS METER
ELECT. SERVICE
USABLE OPEN SPACE (ALL UNITS)
22" CEDAR
14" PALM
24" OAK
9" OAK
12" OAK
DENNIS NORTON HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA AV · CAPITOLA, CA 95010 · 831 476 2616
WRIGHT RESIDENCE
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010
APN 034-141-34
SCALE: 1/8"=1'-0"
JOB NO. WHARF
DATE: 04/11/16
DRAWN: GG
SHEET 2

Attachment: 2205 Wharf Road Plans (1419 : 2205 Wharf Road)



MAIN LEVEL

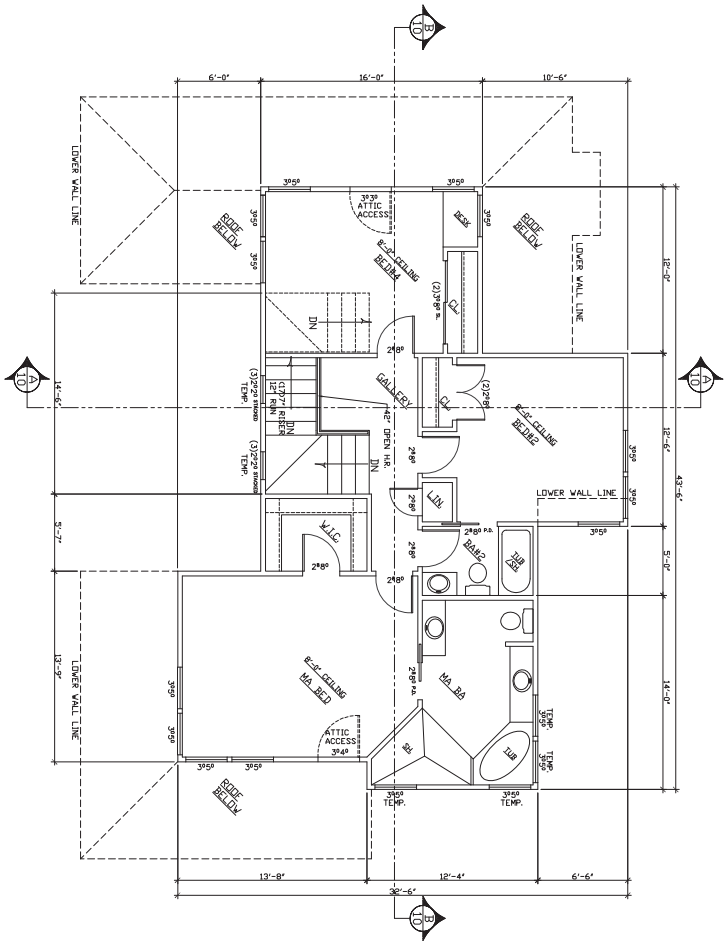
LIVING = 1,164 SF
GARAGE = 436 SF
TOTAL LIVING = 2,244 SF

FLOOR PLAN

1/4"=1'-0"

LOT B PROPOSED 1ST FLOOR PLAN	DENNIS NORTON HOME DESIGN AND PROJECT PLANNING, 712 C CAPITOLA RD. CAPITOLA, CA. 95010 831 476 2616 FAX: 476 2616
WRIGHT RESIDENCE 2205 SOQUEL WHARF RD CAPITOLA, CA 95010 APN 034-141-34	OWNER: MICHAEL WRIGHT 2205 SOQUEL WHARF RD CAPITOLA, CA. 95010
DRAWN: GG SCALE: 1/4"=1'-0" JOB NO.: WHARF B DATE: 01/27/16 SHEET: 6 OF 9 SHEETS	REVISIONS: NO.

Attachment: 2205 Wharf Road Plans (1419 : 2205 Wharf Road)



UPPER LEVEL

LIVING = 880 SF

FLOOR PLAN

1/4"=1'-0"

SHEET	5
OF	
SHEETS	
DRAWN:	GG
SCALE:	1/4"=1'-0"
JOB NO.	WHARF B
DATE:	01/27/16

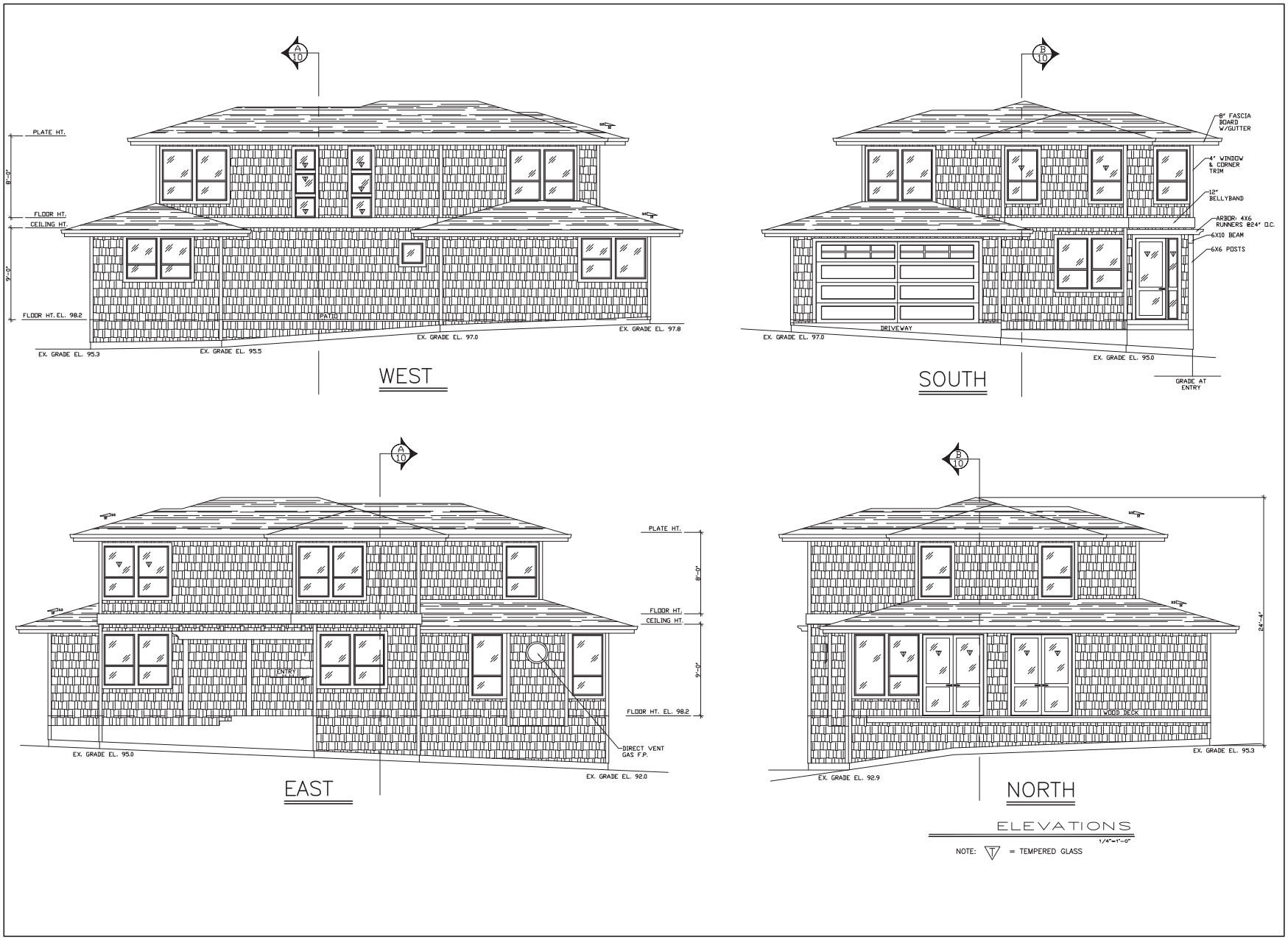
LOT B PROPOSED 2ND FLOOR PLAN

DENNIS NORTON
HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA RD. CAPITOLA, CA. 95010 831 476 2616
FAX: 476 2616

WRIGHT RESIDENCE
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010
APN 034-141-34

OWNER/APPLICANT
CHRISTOPHER WRIGHT
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010

REVISIONS:	BY:



REVISIONS:	BY:

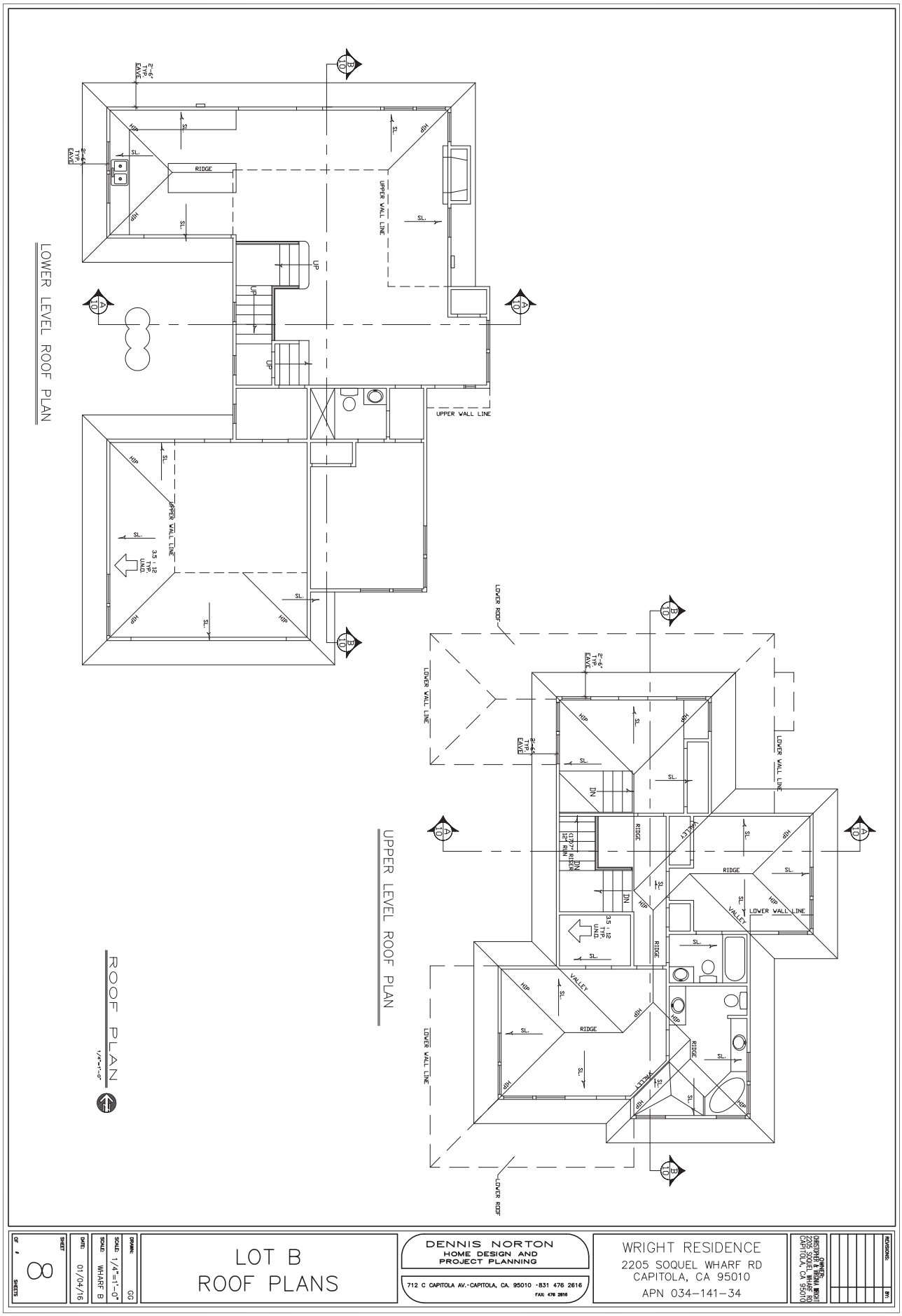
OWNER:
CHRISTOPHER & VIRGINA WRIGHT
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010

WRIGHT RESIDENCE
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010
APN 034-141-34

DENNIS NORTON
HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA AV. CAPITOLA, CA 95010 · 831 476 2616
FAX 476 3816

LOT B ELEVATIONS

DRAWN:	GG
SCALE:	1/4"=1'-0"
JOB:	WHARF B
DATE:	01/27/16
SHEET	7
OF #	SHEETS



Stormwater Pollution Prevention and Protection for Construction Projects

In the City of Capitola, nearly all storm drains discharge directly to the ocean without any treatment. When debris, paint, concrete and other harmful pollutants from construction sites and home construction projects get spilled, washed or washed into the street or storm drain they can damage sensitive creek habitats and end up polluting our bay and ocean.

In order to reduce the amount of pollutants reaching local storm drains and waterways, the City has developed "Best Management Practices" (BMPs) for construction work. All types of construction projects are required to abide by the following mandatory BMPs. These BMPs apply to both new and remodeled residential, commercial, retail, and industrial projects.

In addition to the BMPs listed below, projects disturbing one or more acres of land must obtain coverage under the State Water Resources Control Board (State Water Board) requirements under the Construction General Permit. Construction Activities Storm Water General Permit, or CGP. In regulated storm water runoff from construction sites. In general, activity that results in a land disturbance of equal to or greater than one acre, requires coverage under the CGP. Construction activities associated with linear underground Projects (LUPs) also require coverage under the CGP. It should be noted that projects disturbing less than one acre may also require coverage under the CGP if they are part of a larger common plan of development (phased project). Applicants are responsible for contacting the State Water Board to determine if coverage under the CGP is required. More information on the CGP and QSD/QSPs may be found at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

◆General Construction & Site Supervision

- ☐ Complete and carry a Stormwater Pollution Prevention Plan (SWPPP) when required by the City. Contractor shall comply with the CGP and Better BMPs is required (year round, however, different requirements may be needed for the rainy and non-rainy season.

General Principles

- ☐ Keep all equipment properly maintained and ensure good housekeeping practices are used.
- ☐ Maintain equipment properly.
- ☐ Keep materials away from streets, gutters, storm drains and drainage channels.
- ☐ Ensure dust control water does not leave site or discharge to storm drains.
- ☐ Subcontractors about storm water requirements and be sure that they also abide by these BMPs.
- ☐ Refer to the following approved references for BMP selection, implementation, and on-site management (most recent versions):
  - "Erosion & Sediment Control Field Manual" California Regional Water Quality Control Board San Francisco Bay Region,
  - Manual of Standards for Erosion and Sediment Control Measures, Association of Bay Area Governments (ABAG)
  - Construction Best Management Practices (BMPs) Handbook, California Stormwater Quality Association (CASQA)
  - Construction Site Runoff Management Practices (BMPs) Manual, Storm Water Quality Handbooks, California

Operation and Maintenance

- ☐ Designate one area of the site located away from storm drains, drainage swales, and creeks for auto parking and heavy equipment storage, vehicle refueling and routine equipment maintenance.
- ☐ Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycle as much as possible. Never dump any hazardous wastes in dumpsters or storm drains.
- ☐ Keep dumpster lids closed and secured. For dumpsters or bins that don't have a lid, cover them with tarps or plastic sheeting. Clean out the interior of the dumpster or place them under temporary roofs. Never clean out a dumpster by hosing it down on the construction site.

- ☐ Clean up leaks, drips and other spills immediately so that they do not contaminate the soil or runoff. Use kitty litter, sawdust or rags for small spills, never hose down or bury the spill. Report significant spills immediately. Dispose of cleanup materials properly.
- ☐ Spread dirt piles and stockpiles covered with secured tarps or plastic sheeting.
- ☐ Use dry cleanup methods whenever possible. Never hose down dirty pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter and/or rags) whenever possible. If you must use water, use as little as possible and collect the wash water using absorbent materials or mop and dispose of properly. Sweep up dry materials and dispose properly.
- ☐ Use gravel approaches where truck traffic leaves the site to reduce soil tracked onto the street.
- ☐ Sweep streets at the end of the day. Use dry sweeping methods if possible. Shovel up excess debris. Never hose down streets to clean up dirt.
- ☐ Control the amount of runoff crossing your site especially during excavation by using berms or temporary drainage ditches or sandbags to divert runoff around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.

Materials & Waste Handling

- ☐ Practice source control. Reduce the amount of materials exposed to rainfall. Apply only the amount of fertilizer or pesticide recommended on the packaging or by a qualified landscape professional. Discontinue application of any erodible landscape material within two days before it is forecast to rain or during the rainy season.
- ☐ Store materials in watertight containers and store them in a way to minimize damage and prevent spills. Never store materials in a manner that is subject to runoff or damage by the elements or vandalism.
- ☐ Cover and secure all stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 2 days.
- ☐ Avoid storing materials or wastes next to storm drains or watercourses.
- ☐ Stack erodible landscape material on pallets. Cover or store these materials when they are not being used or applied.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

◆Landscaping, Gardening & Pond/Fountains/Pool/Spa Maintenance

Many landscaping activities and practices expose soils and increase the likelihood of water runoff that will transport soil, pesticides, fertilizers and sediment to the storm drain system. Plants remove pollutants from soil and water through their roots. Healthy soils absorb and store water and pollutants. Mulch and compost can be used to improve the health of soils.

Landscaping & Gardening

- ☐ Protect stockpiles and landscape materials from wind and rain by storing them under tarps or enclosed plastic sheeting.
- ☐ Schedule grading and excavation during dry weather.
- ☐ Protect storm drain inlets with sandbags, gravel filled bags, straw wattles, fiber fabric or other sediment controls.
- ☐ Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Re-vegetation is an excellent form of erosion control for any site.
- ☐ Use mulch, straw, or compost to control erosion on bare areas.

Pools, Spas, Ponds, Fountains and Decorative Pools

- ☐ Never discharge pool or spa water to storm drains or the street or gutter.
- ☐ When draining a pool, fountain, pool or spa, any volumes in excess of 500 gallons must be reported in advance to the City of Capitola Public Works Department. The City will provide guidance on handling special draining needs. Non-chlorinated pool water may be pumped to landscaped areas if you have enough capacity and you do not cause excessive runoff. Do not allow pool water to enter storm drains or waterways.
- ☐ Dechlorinate pool water by using a dechlorinating agent and testing the water with a test kit before draining. Simply draining chlorinated pool water will kill aquatic life in our creeks and bay.
- ☐ Consider discharging pool water to the sanitary sewer. Call Santa Cruz Water Department at 454-2160 for more information.
- ☐ Do not backwash sand filters or pools if you have a cartridge filter. Backwash only enough to clean filters adequately. Contact Santa Cruz Water Department at 454-2160 for more information.
- ☐ Do not backwash sand filters into a street, gutter or storm drain.

◆Prevention of Erosion & Control of Runoff

Erosion control and sediment control must be implemented and maintained on all disturbed areas in order to prevent a net increase of sediment in the site's storm water discharge relative to pre-construction levels. During the rainy season, sediment control measures must be in place before the start of any storm event. Refer to the Erosion & Sediment Control Field Manual, California Regional Water Quality Control Board San Francisco Bay Region, Fourth Edition August 2002 and the Manual of Standards for Erosion and Sediment Control Measures, Association of Bay Area Governments (ABAG), and Construction Best Management Practices (BMPs) Handbook, California Stormwater Quality Association (CASQA)

- ☐ Effective filtration devices, barriers, and earthing devices shall be selected, installed and maintained properly.
- ☐ Fiber rolls, erosion control blankets and berms shall be installed so that the drainage around them does not create additional erosion and this down slope of the fence.
- ☐ If some wattles are used to filter sediment runoff, ensure that the bales are actually filtering the water (and not just causing the water to pool behind the bales and overflow around the bales).
- ☐ Avoid mixing excess amount of fresh concrete or cement on-site.
- ☐ Protect nearby storm drain inlets with gravel bags or other approved method. Do not allow concrete slurry to enter storm drains, gutters or streets.
- ☐ Concrete trucks must wash out into designated areas only. Do not allow concrete to be washed into storm drains or streets. Provide a temporary pit large enough for the liquid waste to be contained and disposed of properly.
- ☐ Wash off exposed aggregate concrete only when the wash water can be collected and disposed of properly.
- ☐ Collect and properly dispose of concrete dust and debris.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, etc. Leave covers in place until the job is completed and all sealants have cured.
- ☐ Avoid tracking dirt or other materials off-site. Clean off-site paved areas and sidewalks using dry sweeping methods if possible. Dirt and debris shall be collected and properly disposed. Do not dispose of collected debris in the street or alley.
- ☐ Do not allow muddy construction vehicles to leave the site. Construct stabilized construction entrances that are adequate for the size of the construction project. Entrances shall be constructed of quarry rock, crushed concrete or recycled concrete.
- ☐ Do not clean vehicles or equipment on-site using solvents or degreasing agents. When washing vehicles, use designated, bermed wash areas to contain wash water. Do not allow wash water to leave the site or enter storm drains.
- ☐ If conducting sidewalk work, material stockpiles must be removed and cleaned up by the end of each day. Sweep or collect unused materials and debris that remain on pavement and dispose of properly.
- ☐ Protect nearby storm drain inlets, gutters and ditches from construction debris. Ensure that rubbish is disposed properly. Never throw or abandon materials in public areas.

◆Earth Moving Activities & Heavy Equipment

Soil excavation and grading operations loosen large amounts of soil that can be conveyed into storm drains when rainfall or irrigation runoff flows across disturbed areas. These activities can also create dust problems that impact local air quality. Proper management of heavy equipment and vehicles will help reduce pollutants associated with fuels, oils, and other fluids.

- ☐ Maintain all heavy equipment, inspect frequently for leaks, and repair leaks immediately upon discovery.
- ☐ Perform major maintenance, repair jobs and vehicle and equipment washing off-site.
- ☐ Contain and properly dispose of all wastes generated on-site, including recyclable materials and trash.
- ☐ Dispose of hazardous wastes properly. Potential pollutants include waste paints, solvents, cleaning fluids, asphalt products, concrete curing compounds and additives, pesticides, acids, and debris contaminated with petroleum products.
- ☐ Do not allow drips and spills. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste.
- ☐ Do not clean equipment on-site.
- ☐ Do not clean equipment on the concrete equipment pads or clean equipment. Only use water for onsite cleaning.
- ☐ Cover exposed piles of soil and wind erodible construction materials.
- ☐ Protect adjacent properties by containing and securing all dust control measures.
- ☐ Limit grading to the smallest practical area at one time.
- ☐ Prohibit all dust producing activities when wind velocity is excessive.

Pre-Rain Considerations

- ☐ Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation and place other erosion controls before rain begins.
- ☐ Schedule grading and excavation work during dry weather. Stabilize all denuded areas, install erosion controls and complete all earthwork and clearing activities before the onset of wet weather.
- ☐ Unless specifically approved on the project's drainage plan, grading, sediment and erosion control plan, clearing, excavation and grading activities shall not occur during the rainy season (October 15 to April 15).
- ☐ Monitor the 24-hour rain forecast. Adjust your activities if rain is predicted.

Post-Rain Considerations

- ☐ Remove all temporary protections and repair all permanent erosion controls after each storm.
- ☐ Check all storm drain inlets and make sure they are free of sediment and debris.
- ☐ Maintain a spill clean-up kit on site.
- ☐ Use dry cleanup methods whenever possible. Never hose down dirty pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter and/or rags) whenever possible and properly dispose of absorbent materials.
- ☐ Use as little water as possible for dust control. If water is used, ensure it does not leave dirt or discharge to storm drains.
- ☐ Sweep, shovel, and properly dispose of litter, dirt, and debris from paved areas and sidewalks. Do not hose down paved areas to the storm drain.
- ☐ Dirt, sediment, and debris that remain on paved areas may be washed into the storm drain system when it rains. Make sure that you remove all debris from paved areas before the rainy season begins.

◆Painting, Varnish & Application of Solvents & Adhesives

- ☐ Never clean brushes or other painting tools in the street or gutter. Clean brushes and rollers with water as much as possible. Paint containing oil or solvents must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.
- ☐ When stripping or cleaning building exteriors with high-pressure water, block storm drains to prevent flow to creeks and the Monterey Bay.
- ☐ Do not paint exterior buildings constructed pre-1978 on days when more than 4 hours of rain is forecast. Rain can cause lead paint chips to enter storm drains and creeks. Lead paint chips are not visible to the naked eye and pose a significant hazard to human health and safety. Remove paint chips as soon as they are present. Before scraping paint or cleaning a pre-1978 buildings exterior with water under high pressure, test paint for lead by taking paint scrapings to a local, state-certified laboratory.

Chips, Dust and Particles from Paint or Varnish Removal

- ☐ Cover all storm drain inlets and maintain these protections until all paint work is complete and dried.
- ☐ Chemical paint or varnish stripping residue, chips and dust from marine paints or varnishes, or paints containing lead, mercury or tributyltin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- ☐ Non-hazardous paint chips and dust from dry scraping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.

Removal of Surface Coatings

- ☐ Chemical paint or varnish stripping residue, chips and dust from marine paints or varnishes, or paints containing lead, mercury or tributyltin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- ☐ When stripping or cleaning building exteriors with high-pressure water, block storm drains to prevent flow to creeks and the Monterey Bay.
- ☐ Do not paint exterior buildings constructed pre-1978 on days when more than 4 hours of rain is forecast. Rain can cause lead paint chips to enter storm drains and creeks. Lead paint chips are not visible to the naked eye and pose a significant hazard to human health and safety. Remove paint chips as soon as they are present. Before scraping paint or cleaning a pre-1978 buildings exterior with water under high pressure, test paint for lead by taking paint scrapings to a local, state-certified laboratory.

Chips, Dust and Particles from Paint or Varnish Removal

- ☐ Cover all storm drain inlets and maintain these protections until all paint work is complete and dried.
- ☐ For water based paints, paint out brushes to the extent possible and rinse into an interior sink that goes to the sanitary sewer.
- ☐ For oil based paints, paint out brushes to the extent possible and clean with thinner or solvent. Filter and reuse thinners and solvents whenever possible. Dispose of excess liquids and residue as hazardous waste.

Disposal of Surface Coatings

- ☐ Paint out brushes to the extent possible and rinse into an interior sink that goes to the sanitary sewer.
- ☐ Recycle, return to supplier or donate unwanted water-based (latex) paint. Oil-based paint may be recycled or disposed of as hazardous waste. Do not put paint in the garbage or allow it to dry up in the can.
- ☐ When the job is completed, collect all unwanted paint and dispose of properly. Never leave or abandon materials on-site, and ensure that nothing has drifted toward the street, gutter, or catch basin.

◆Roadwork & Paving

- ☐ Protect nearby storm drain inlets and adjacent water bodies prior to applying an asphalt or concrete.
- ☐ Protect nearby storm drain inlets from sediment when saw cutting. Use filter fabric, catch basin inserts or gravel bags to keep slurry out of the storm drain system.
- ☐ Shovel, absorb or vacuum saw-cut slurry and pick up all broken pavement. Do not hose these materials into the storm drain system.
- ☐ After breaking up old pavement, sweep up materials and recycle as much as possible. Properly dispose of non-recyclable materials.
- ☐ Cover and seal nearby storm drain inlets and manholes before applying seal coat, slurry seal, etc. Leave covers in place until the job is completed and all sealants have cured.
- ☐ Avoid tracking dirt or other materials off-site. Clean off-site paved areas and sidewalks using dry sweeping methods if possible. Dirt and debris shall be collected and properly disposed. Do not dispose of collected debris in the street or alley.
- ☐ Do not allow muddy construction vehicles to leave the site. Construct stabilized construction entrances that are adequate for the size of the construction project. Entrances shall be constructed of quarry rock, crushed concrete or recycled concrete.
- ☐ Do not clean vehicles or equipment on-site using solvents or degreasing agents. When washing vehicles, use designated, bermed wash areas to contain wash water. Do not allow wash water to leave the site or enter storm drains.
- ☐ If conducting sidewalk work, material stockpiles must be removed and cleaned up by the end of each day. Sweep or collect unused materials and debris that remain on pavement and dispose of properly.
- ☐ Protect nearby storm drain inlets, gutters and ditches from construction debris. Ensure that rubbish is disposed properly. Never throw or abandon materials in public areas.

◆Concrete, Cement, & Masonry Products

- ☐ Protect nearby storm drain inlets and adjacent water bodies prior to applying concrete, mortar, or grout.
- ☐ Avoid mixing excess amount of fresh concrete or cement on-site.
- ☐ Protect nearby storm drain inlets from sediment when saw cutting. Use filter fabric, catch basin inserts or gravel bags to keep slurry out of the storm drain system.
- ☐ Shovel, absorb or vacuum saw-cut slurry and pick up all broken pavement. Do not hose these materials into the storm drain system.
- ☐ After breaking up old pavement, sweep up materials and recycle as much as possible. Properly dispose of non-recyclable materials.
- ☐ Concrete trucks must wash out into designated areas only. Do not allow concrete to be washed into storm drains or streets. Provide a temporary pit large enough for the liquid waste to be contained and disposed of properly.
- ☐ Wash off exposed aggregate concrete only when the wash water can be collected and disposed of properly.
- ☐ Collect and properly dispose of concrete dust and debris.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, etc. Leave covers in place until the job is completed and all sealants have cured.
- ☐ Avoid tracking dirt or other materials off-site. Clean off-site paved areas and sidewalks using dry sweeping methods if possible. Dirt and debris shall be collected and properly disposed. Do not dispose of collected debris in the street or alley.
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- ☐ Protect nearby storm drain inlets, gutters and ditches from construction debris. Ensure that rubbish is disposed properly. Never throw or abandon materials in public areas.

◆Site Clean Up

- ☐ Clean up by sweeping instead of hosing down whenever possible. Dispose of litter and debris in the garbage.
- ☐ Never clean brushes or other painting tools in the street or gutter. Clean brushes and rollers with water as much as possible. Paint containing oil or solvents must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.
- ☐ Do not paint exterior buildings constructed pre-1978 on days when more than 4 hours of rain is forecast. Rain can cause lead paint chips to enter storm drains and creeks. Lead paint chips are not visible to the naked eye and pose a significant hazard to human health and safety. Remove paint chips as soon as they are present. Before scraping paint or cleaning a pre-1978 buildings exterior with water under high pressure, test paint for lead by taking paint scrapings to a local, state-certified laboratory.
- ☐ Effectively manage all wastes, including cigarette butts, food containers, and portable toilet waste. Make sure that wastes are properly covered, contained and disposed of properly.
- ☐ Clean up leaks, drips and other spills immediately so that they do not contaminate the soil or runoff. Use kitty litter, sawdust or rags for small spills, never hose down or bury the spill. Report significant spills immediately. Dispose of cleanup materials properly.
- ☐ Spread dirt piles and stockpiles covered with secured tarps or plastic sheeting.
- ☐ Use dry cleanup methods whenever possible. Never hose down dirty pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter and/or rags) whenever possible and properly dispose of absorbent materials.
- ☐ Use as little water as possible for dust control. If water is used, ensure it does not leave dirt or discharge to storm drains.
- ☐ Sweep, shovel, and properly dispose of litter, dirt, and debris from paved areas and sidewalks. Do not hose down paved areas to the storm drain.
- ☐ Dirt, sediment, and debris that remain on paved areas may be washed into the storm drain system when it rains. Make sure that you remove all debris from paved areas before the rainy season begins.

Project and Property Owner

Signed: _____ Date: _____

Print Name: _____

Project Owner or General Contractor

DRAWN:	GG
SCALE:	NONE
JOB NO.	WHARF
DATE:	01/24/16
SHEET	BMP
OF '	SHEETS

BEST MANAGEMENT PRACTICES

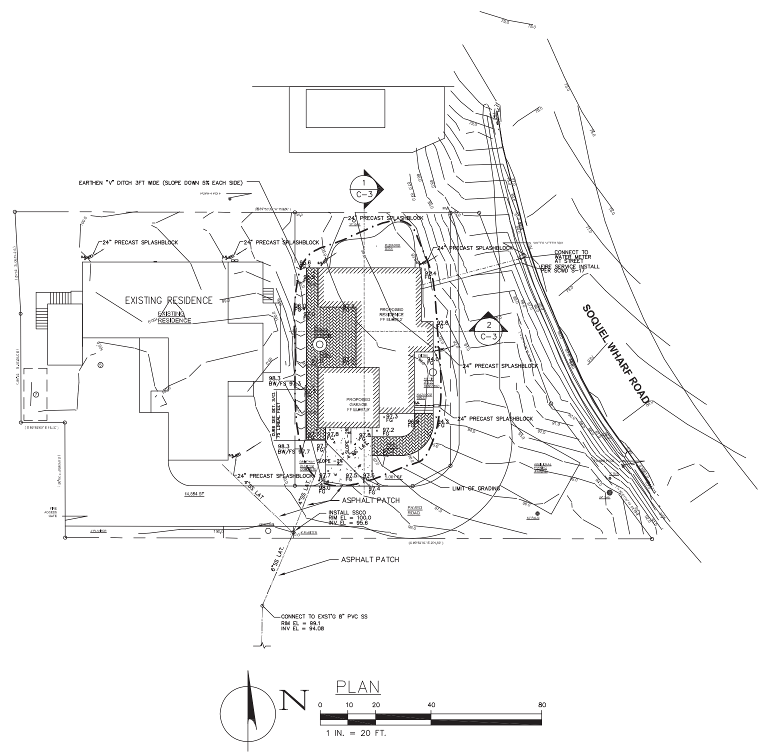
DENNIS NORTON
HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA AV- CAPITOLA, CA 95010 - 831 476 2616
FAX 831 476 2616

WRIGHT RESIDENCE
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010
APN 034-141-34

OWNER: BRENDA WRIGHT
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010

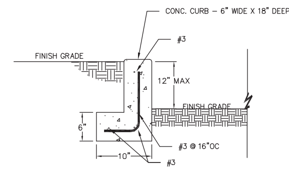
REVISIONS:		REV.

Attachment: 2205 Wharf Road Plans (1419 : 2205 Wharf Road)

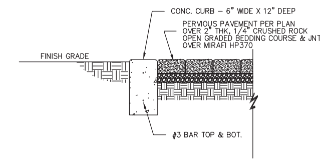


PLAN

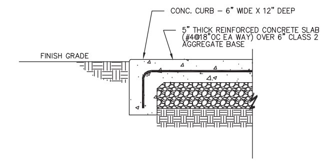
1 IN. = 20 FT.



③ CURB DETAIL
SCALE: 1"=1'-0"



① SEMI–PERMEABLE PAVEMENT (PATIO & WALK)
SCALE: 1"=1'-0"



② CONCRETE DRIVEWAY
SCALE: 1"=1'-0"

ESTIMATED EARTHWORK VOLUMES:

AREA	EXCAVATION
RESIDENCE	(20) CU YARDS
NET EXPORT	20 CU YARDS

EARTHWORK VOLUMES SHOWN ARE TO SATISFY PERMIT REQUIREMENTS ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES. ACTUAL EARTHWORK VOLUMES MAY DIFFER FROM THE ESTIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE EARTHWORK VOLUMES PRIOR TO CONSTRUCTION.

IMPERVIOUS SURFACES

TOTAL SITE AREA =	5494 SF	0.13 AC
EXISTING IMPERVIOUS SURFACES =	0 SF	0 AC
PROPOSED IMPERVIOUS SURFACES =	2126 SF	0.049 AC
INCREASE IN IMPERVIOUS SURFACES =	2126 SF	0.049 AC
EXISTING SEMI–PERVIOUS SURFACES =	0 SF	0.0 AC
PROPOSED SEMI–PERVIOUS SURFACES = (WALK/PATIO)	732 SF	0.017 AC

OTHER AREAS ARE GRASS AND LANDSCAPING

SANITARY SEWER FLOW

Q =(1.49/n)(πD2/4)((D/4)2/3)(S1/2)

DIAMETER "D"	ROUGHNESS "n"	SLOPE "S1"	FLOW RATE "Q"
4"	150	2%	196 gpm
6"	150	2%	568 gpm
8"	150	1%	833 gpm

NOTES:
1. NO SITE DISTURBANCE OF ANY KIND IS TO TAKE PLACE PRIOR TO HOLDING A PRE–CONSTRUCTION MEETING ONSITE WITH ROBERT LOVELAND ENVIRONMENTAL PLANNER (831)454–3163

LEGEND

- EDGE OF DRIVEWAY
- LIMIT OF GRADING
- PROPOSED PERVIOUS CONCRETE
- PROPOSED SEMI–PERMEABLE PAVERS
- DIRECTION OF SLOPE
- PROPOSED SANITARY SEPTIC LINE
- PROPOSED 1" DIA DOMESTIC WATER LINE
- —FW— PROPOSED FIRE WATER LINE

ABBREVIATIONS

AC	ASPHALT CONCRETE
BW	BOTTOM OF WALL
CB	CATCH BASIN
CONC	CONCRETE
DS	DOWN SPOUT
SSCO	SANITARY SEWER CLEAN OUT
SS	SANITARY SEWER
TW	TOP OF WALL

REGISTERED PROFESSIONAL ENGINEER KEVIN P. BAIRD No. C62991 EXP. 06/30/16 CIVIL STATE OF CALIFORNIA

REVISIONS

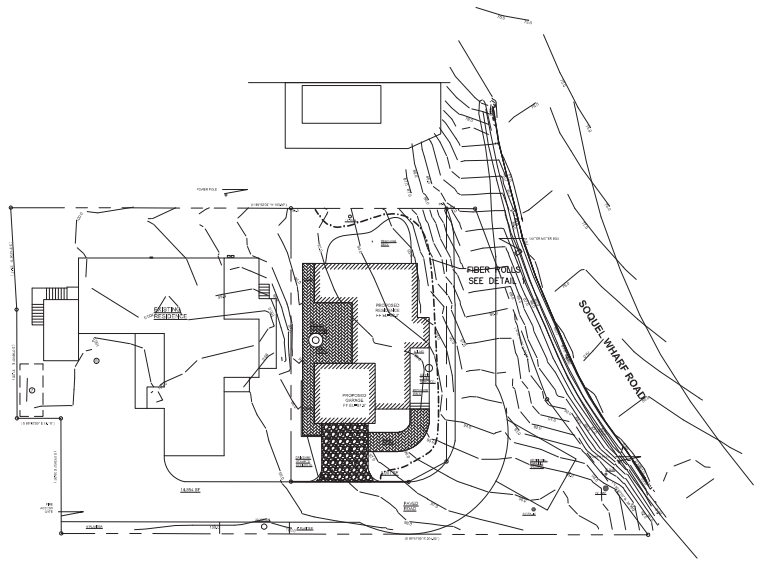
BAIRD STRUCTURAL DESIGN, INC.
831-661-0564

GRADING, DRAINAGE & UTILITIES
1/8"=1'-0"

WRIGHT RESIDENCE

2205 SOQUEL WHARF ROAD
CAPITOLA, CA
APN 034-141-34

DATE 06/01/16
SCALE
DRAWN KPB
JOB 160203
SHEET C1
OF SHEETS



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PLAN

0 10 20 40 80

1 IN. = 10 FT.

CONTACT INFORMATION

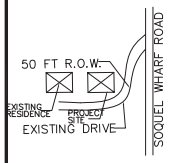
OWNER

CHRISTOPHER & VIRGINIA WRIGHT
2205 SOQUEL WHARF ROAD
CAPITOLA, CA 95010

ENGINEER

BAIRD STRUCTURAL DESIGN
7960B SOQUEL DRIVE #240
APTOS, CA 95003
PHONE: (831)661-0564
EMAIL: kpbengineer@yahoo.com

VICINITY MAP



TOTAL AREA OF DISTURBANCE: 2852SF = 0.07 AC

SITE HOUSEKEEPING REQUIREMENTS

Construction Materials

All loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.) shall be covered and bermed.

All chemicals shall be stored in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

Exposure of construction materials to precipitation shall be minimized. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

Best Management Practices to prevent the off-site tracking of loose construction and landscape materials shall be implemented.

Waste Management

Disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system shall be prevented.

Sanitation facilities shall be contained (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water, and shall be located a minimum of 20 feet away from an inlet, street or driveway, stream, riparian area or other drainage facility.

Sanitation facilities shall be inspected regularly for leaks and spills and cleaned or replaced as necessary.

Cover waste disposal containers at the end of every business day and during a rain event.

Discharges from waste disposal containers to the storm water drainage system or receiving water shall be prevented.

Stockpiled waste material shall be contained and securely protected from wind and rain at all times unless actively being used.

Procedures that effectively address hazardous and non-hazardous spills shall be implemented.

Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

Concrete washout areas and other washout areas that may contain additional pollutants shall be contained so there is no discharge into the underlying soil and onto the surrounding areas.

Vehicle Storage and Maintenance

Measures shall be taken to prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.

All equipment or vehicles, which are to be fueled, maintained and stored onsite shall be in a designated area fitted with appropriate BMPs.

Leaks shall be immediately cleaned and leaked materials shall be disposed of properly.

Landscape Materials

Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

Contain fertilizers and other landscape materials when they are not actively being used.

Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.

LEGEND

EDGE OF PAVEMENT

CONSTRUCTION ENTRANCE – DETAIL 2

ABBREVIATIONS

AC	ASPHALT CONCRETE
CB	CATCH BASIN
CONC	CONCRETE
SSCO	SANITARY SEWER CLEAN OUT
SS	SANITARY SEWER

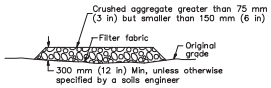
EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHOWN SHALL BE UTILIZED CONTINUOUSLY FROM OCTOBER 15 TO APRIL 15.

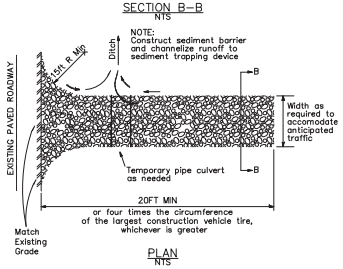
2. PROTECT ALL DISTURBED SOILS WITH VEGETATION AND/OR MULCH.

3. KEEP ALL DRAINAGE FACILITIES FREE OF SILT AND DEBRIS.

4. PLANTING SHALL BE COMPLETED NOT MORE THAN 90 DAYS AFTER COMPLETION OF GRADING.

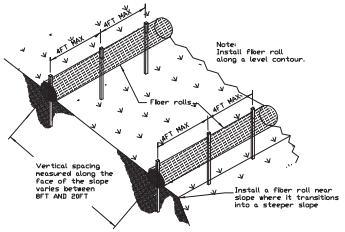


SECTION B–B
NTS

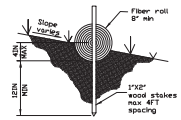


PLAN
NTS

2 CONSTRUCTION ENTRANCE DETAIL



TYPICAL FIBER ROLL INSTALLATION
N.T.S.



1 EROSION CONTROL DETAIL
SCALE: N/A

REGISTERED PROFESSIONAL ENGINEER
KEITH P. BAIRD
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EXP. 08/30/16
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STATE OF CALIFORNIA

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EROSION CONTROL
1/8"=1'-0"

WRIGHT RESIDENCE

2205 SOQUEL WHARF ROAD
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SHEET C2
OF SHEETS

REINFORCED CONCRETE

1. CEMENT SHALL CONFORM TO ASTM C150, TYPE II.

2. AGGREGATES SHALL CONFORM TO SPECIFICATIONS FOR CONCRETE AGGREGATES ASTM C330R SPECIFICATIONS FOR LIGHTWEIGHT AGGREGATES FOR STRUCTURAL CONCRETE ASTM 330. THE MAXIMUM SIZE OF THE AGGREGATE SHALL NOT BE LARGER THAN ONE-FIFTH OF THE NARROWEST DIMENSION BETWEEN SIDES OF THE FORMS WITHIN WHICH THE CONCRETE IS TO CAST, NOR LARGER THAN THREE-FOURTHS OF THE MINIMUM CLEAR SPACING BETWEEN REINFORCING BARS, OR BETWEEN REINFORCING BARS AND FORMS, FOR SLABS, THE MAXIMUM SIZE OF AGGREGATE SHALL NOT BE LARGER THAN ONE-THIRD THE SLAB THICKNESS.

3. WATER USED IN MIXING CONCRETE SHALL BE POTABLE, CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO CONCRETE OR STEEL. IN ADDITION, THE MIXING WATER FOR CONCRETE WHICH WILL CONTAIN ALUMINUM EMBEDMENTS, INCLUDING THAT PORTION OF THE MIXING WATER CONTRIBUTED IN THE FORM OF FREE MOISTURE ON THE AGGREGATES, SHALL NOT CONTAIN DELETERIOUS AMOUNTS OF CHLORIDE ION. MAXIMUM WATER/CEMENT RATIO SHOULD BE 0.55.

4. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C150.

5. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL MOLDS, GROOVES AND ORNAMENTAL CUPS, ETC., TO BE CAST IN CONCRETE AND FOR EXTENT OF DEPRESSIONS, CURBS AND RAMPS,

6. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE LOCATION OF SLEEVES, INSERTS, ETC. IN CONCRETE.

7. ALL REINFORCING BARS, ANCHOR BOLTS, AND INSERTS TO BE WELL SECURED PRIOR TO PLACING CONCRETE.

8. LIGHT-WEIGHT CONCRETE FILL SHALL HAVE A MAXIMUM DRY DENSITY OF 110 pcf. ALL OTHER CONCRETE SHALL HAVE A DENSITY LESS THAN 150 pcf.

9. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE AS NOTED:

FOUNDATION & STEM	2,500 psi

10. PROJECTING CORNERS OF SLAB, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH A 3/4" CHAMFER, UNLESS OTHERWISE NOTED.

11. NO CONDUITS PLACED IN THE SLAB SHALL HAVE AN OUTSIDE DIAMETER GREATER THAN 1/3 THE THICKNESS OF THE SLAB. NO CONDUIT SHALL BE EMBEDDED IN A SLAB THAT IS LESS THAN 1-1/2" THICK, EXCEPT FOR LOCAL OFFSETS. MIN. CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 6".

12. ADMIXTURES MAY NOT BE USED WITHOUT PRIOR APPROVAL OF THE ENGINEER. ADMIXTURES USED TO INCREASE THE WORKABILITY OF THE CONCRETE SHALL NOT REDUCE THE STRENGTH OF THE CONCRETE.

13. CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO PROVIDE AN AVERAGE COMPRESSIVE STRENGTH SUFFICIENTLY HIGH TO MINIMIZE THE FREQUENCY OF STRENGTH TEST BELOW THE VALUE OF SPECIFIED COMPRESSIVE STRENGTH OF THE CONCRETE F'c. SELECTION OF CONCRETE PROPORTIONS SHALL BE ESTABLISHED ON THE BASIS TO PROVIDE CONFORMANCE WITH THE STRENGTH TEST REQUIREMENTS OF CBC; ADEQUATE WORKABILITY AND PROPER CONSISTENCY TO PERMIT THE CONCRETE TO BE WORKED READILY INTO THE FORMS AND AROUND REINFORCEMENT UNDER THE CONDITIONS OF PLACEMENT TO BE EMPLOYED WITHOUT SEGREGATION OR BLEEDING.

14. THE SLUMP OF THE CONCRETE SHALL BE THE MINIMUM THAT IS PRACTICABLE, WHEN VIBRATORS ARE USED TO CONSOLIDATE THE CONCRETE THE SLUMP SHALL NOT EXCEED FOUR-INCHES; OTHERWISE, THE SLUMP SHALL NOT EXCEED FIVE-INCHES.

15. HOT-WEATHER REQUIREMENTS: IN HOT WEATHER, PROPER ATTENTION SHALL BE GIVEN TO INGREDIENTS, PRODUCTION METHODS, HANDLING, PLACING, PROTECTION AND CURING TO PREVENT EXCESSIVE CONCRETE TEMPERATURES OR WATER EVAPORATION WHICH WILL IMPAIR THE REQUIRED STRENGTH OR SERVICEABILITY OR THE MEMBER OR STRUCTURE. USE OF WINDBREAKS, SUNSHADES, FOG SPRAYS OR OTHER DEVICES SHALL BE PROVIDED AS REQUIRED. CONCRETE TEMPERATURES SHALL BE LESS THAN 90 DEGREES FAHRENHEIT. CONCRETE SHALL NOT HAVE A PLACING TEMPERATURE THAT WILL CAUSE DIFFICULTY FROM LOSS OF SLUMP, FLASH SET, OR COLD JOINTS.

16. FORMWORK, EMBEDDED PIPES, CONSTRUCTION JOINTS: FORMS SHALL RESULT IN A FINAL STRUCTURE WHICH CONFORMS TO THE SHAPES, LINES AND DIMENSIONS OF THE MEMBER AS REQUIRED BY THE PLANS AND SPECIFICATIONS AND SHALL BE SUBSTANTIAL AND SUFFICIENTLY TIGHT TO PREVENT LEAKAGE OF MORTAR. THEY SHALL BE PROPERLY BRACED OR TIED TOGETHER SO AS TO MAINTAIN POSITION AND SHAPE. FORMS AND THEIR SUPPORTS SHALL BE DESIGNED SO THAT PREVIOUSLY PLACED STRUCTURES WILL NOT BE DAMAGED.

17. CONCRETE TO BE FIVE SACKS CEMENT PER CUBIC YARD, MINIMUM.

REINFORCING STEEL

1. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS MUST FOLLOW THE A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, A.C.I. 315-LATEST ED, U.N.O.

2. ALL REINFORCING BARS SHALL CONFORM TO THE STANDARD SPECIFICATION FOR DEFORMED BILLED-STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A615-62c GRADE 60 EXCEPT #3 AND #4 BARS SHALL BE GRADE 40.

3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

4. LAPS AT BAR SPLICES SHALL BE: 30 BAR DIA. (12" MIN.) FOR GRADE 40; 36 BAR DIA. FOR GRADE 60 IN CONCRETE. 40 BAR DIA. (18" MIN.) FOR MASONRY, U.N.O.

5. ALL REINFORCING BARS SHALL BE PROVIDED WITH THE FOLLOWING CONCRETE COVER:

FOOTINGS CAST AGAINST EARTH	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER,	2 IN.
BEAMS AND GIRDERS	1-1/2 IN.
COLUMN TIES	1-1/2 IN.
SLABS (#6 AND SMALLER)	3/4 IN.

6. WHERE CONTINUOUS BARS ARE CALLED OUT, PROVIDE CONTACT SPLICES.

7. VERTICAL BARS SHALL BE ACCURATELY POSITIONED AT THE CENTER OF THE WALL, U.N.O. ON DETAILS, AND SHALL BE TIED IN PLACE AT TOP AND BOTTOM.

8. DOWELS BETWEEN FOOTINGS AND WALLS SHALL BE THE SAME GRADE, SIZE, AND SPACING AT VERTICAL REINFORCING.

9. PROVIDE #3 SPACER TIES AT 24" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN PLACE, UNLESS OTHERWISE NOTED.

10. ALL BARS SHALL BE BENT COLD. NO BAR, PARTIALLY EMBEDDED IN CONCRETE SHALL BE FIELD BENT.

GENERAL DESIGN CRITERIA:

CALIFORNIA BUILDING CODE 2013 IS USED FOR THE STRUCTURAL DESIGN.

GENERAL NOTES

1. THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL DRAWINGS AND SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES HE MAY FIND, BEFORE PROCEEDING WITH WORK.

2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SITE CONDITIONS NOT REFLECTED ON THE WORKING DRAWINGS OR DIFFERENT FROM MAXIMUM OR MINIMUM DIMENSIONS INDICATED, INCLUDING RETAINED EARTH HEIGHT, CONFLICT IN GRADES, ADVERSE SOIL CONDITIONS, GROUND WATER PRESENT, DEEPENED FOOTINGS, UNCOVERED AND UNEXPECTED UTILITY LINES, ETC.

3. CONTRACTORS SHALL COORDINATE DIMENSIONS, LOCATIONS, AND SIZES OF OPENINGS IN FLOORS AND WALLS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.

4. NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.

5. DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING SHORING AND TEMPORARY BRACING. HE SHALL TAKE ALL NECESSARY MEASURES TO INSURE THE SAFETY OF ALL PERSONS AND STRUCTURES AT THE SITE AND ADJACENT TO THE SITE. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR ENGINEER SHALL NOT INCLUDE REVIEW OF THESE MEASURES.

6. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST APPROVED CALIFORNIA BUILDING CODE.

7. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.

8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF EXISTING UTILITY SERVICES IN THE AREA TO BE EXCAVATED PRIOR TO BEGINNING OF WORK.

FOUNDATION

1. FOUNDATION GRADING AND PREPARATION SHALL FOLLOW THE RECOMMENDATIONS PROVIDED IN THE SOIL INVESTIGATION REPORT THARPE & ASSOCIATES.

2. THE MAXIMUM ALLOWABLE SOIL BEARING PRESSURE SHALL BE AS FOLLOWS:

		D + L	D + L + SEIS.
FOUNDATIONS	1500 psf	2000 psf	

3. BOTTOM OF FOOTING SHALL BE EMBEDDED AT LEAST 18 INCHES BELOW THE LOWEST ESTABLISH ADJACENT GRADE. MIN. FOOTING WIDTH SHALL BE 15 INCHES.

4. BOTTOM OF FOOTING ELEVATIONS SHALL BE ADJUSTED TO SUIT FIELD CONDITIONS THAT MEET THE ABOVE CRITERIA.

5. PLACE CONCRETE SLAB OVER 2 IN. SAND, OVER GRAVEL BASE.

6. CONCRETE SLAB FOR SITE WORK SHALL BE 4 INCH ACTUAL THICKNESS #4@18" O.C., EACH WAY TOP & BOTTOM U.O.N.

7. HOLDOWN ANCHORS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.

8. SILL PLATE ANCHORS:

5/8" DIA. x 12" ANCHOR BOLTS WITH 3" sq. x 0.229" WASHERS AT 3'-7½" o.c. AND NOT MORE THAN 12" FROM THE ENDS.

9. THE FOOTING EXCAVATIONS SHALL BE KEPT FREE FROM LOOSE MATERIAL AND STANDING WATER.

10. FOR NON-BEARING WALL SILL PLATE ATTACHMENT SEE GENERAL STRUCTURAL NOTES SHEET AND DETAILS.

11. SUBMIT COMPACTION TEST REPORTS FOR ALL FILL BY A QUALIFIED TESTING LAB TO ARCHITECT AND BUILDING DEPARTMENT. ALL LOOSE SOIL AND FILL DIRT SHALL BE COMPACTED.

12. CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE, GROUND, AND OR SEEPAGE WATER.

13. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION ALL CRIBBING, SHEATHING, AND SHORING REQUIRED TO SAFELY RETAIN ALL GRADES.

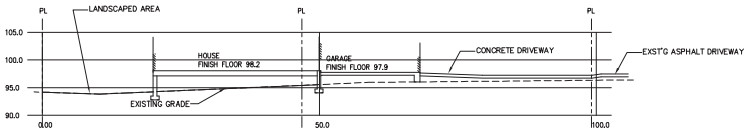
14. FOR FINISH SLAB ELEVATIONS, SLOPES AND DRAINS, SEE ARCHITECT'S PLANS AND SITE PLANS.

15. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.

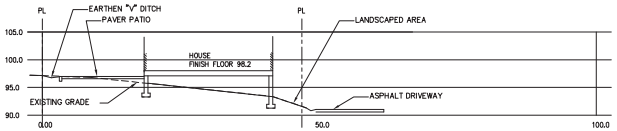
16. THE FOUNDATIONS WERE DESIGNED IN ACCORDANCE WITH MINIMUM CBC 2007 VALUES.

17. ALL FOOTINGS SHALL BE POURED MONOLITHICALLY.

18. FOR SILL PLATE ATTACHMENT SEE SHEAR WALL SCHEDULE SHEET AND FOUNDATION DETAILS.



SITE CROSS SECTION 1/C3
SCALE: 1"=10'



SITE CROSS SECTION 2/C3
SCALE: 1"=10'

REGISTERED PROFESSIONAL ENGINEER
KEVIN P. BAIRD
No. C62905
EXP. 06/30/16
CIVIL
STATE OF CALIFORNIA

REVISIONS

BAIRD STRUCTURAL DESIGN, INC.
PROFESSIONAL ENGINEERING
APTOS CALIFORNIA
831-661-0564

NOTES & SECTIONS

1"=1'-0"

WRIGHT RESIDENCE

2205 SOQUEL WHARF ROAD
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SHEET C3
OF SHEETS

PLANTING NOTES

1. SOIL ADDITIVES SHALL BE THOROUGHLY MIXED INTO EXISTING SOILS ON SITE BY ROTOTILLING ONCE IN EACH DIRECTION. ALL SOIL SHALL BE CLEAR OF DEBRIS AND CONSTRUCTION SPOILS. INCORPORATE THE FOLLOWING INTO THE TOP 12" OF SOIL PER 1000 SF.

   SOIL AMENDMENTS:

NITROFORM (38-0-0) 20 LBS	30 LBS
11-52-0	10 LBS
POTASSIUM SULFATE (0-0-50)	10 LBS
FERROUS SULFATE (20% FE)	10 LBS

2. ALL LANDSCAPE AREAS TO BE MULCHED WITH 3" THICK LAYER OF BARK MULCH EQUAL TO REDWOOD, FIR, CEDAR, OR A COMBINATION OF THESE. THE COMPOSITION OF THE MULCH SHALL BE A MIX OF SHREDDED BARK, WOOD AND SAWDUST, 0-4". NO GORILLA HAIR SHALL BE USED.
3. FERTILIZER TABLETS: SHALL BE AS MANUFACTURED BY GRO-POWER™ INC. OR EQUAL - 7 GRAM TABLETS CONTAINING 12-8-8, NPK IN A ONE-YEAR TIME-RELEASE FORMULATION WITH 4% HUMIC ACID, 20% HUMUS, 2% IRON, 3.5% SULFUR.
4. ALL PLANTS 5 GAL AND LARGER SHALL BE INSTALLED WITH GOPHER BASKETS.
5. CONTRACTOR SHALL BE HELD RESPONSIBLE TO PROTECT AND MAINTAIN ALL PLANT MATERIAL FROM TIME OF PLANTING TO TIME OF FINAL ACCEPTANCE.

GRAPHIC LEGEND

DECORATIVE ROCK BOULDERS VARYING IN SIZE FROM 3' MIN. TO 6'+. ALL BOULDERS MUST BURIED AT LEAST 1/4 OF THEIR SIZE FOR A MORE NATURAL LOOK. ROCK TO BE 'SONOMA FIELD STONE' OR EQUAL. AVAILABLE FROM CENTRAL HOME SUPPLY

MULCH LAYER ONLY PER NOTE #2. NO PLANTING.

NEW REDWOOD NEIGHBOR FENCE AT PROPERTY LINE
6' IN HEIGHT

TREE REMOVAL/REPLACEMENT

TREES TO BE REMOVED: (1) ONE 30" CEDAR PER ARCHITECTURAL PLANS

TREES TO BE PLANTED: (4) FOUR 24" BOX TREES

PLANTING SCHEDULE

TREES: BOTANICAL NAME / COMMON NAME	SIZE	QTY	MATURE HEIGHT X WIDTH	EMITTER SCHEDULE
LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ' / WHITE CRAPE MYRTLE MULTI-TRUNK	24" BOX	4	18'X18'	(4) 2.0 GPH

SHRUBS: BOTANICAL NAME / COMMON NAME	SIZE	QTY	MATURE HEIGHT X WIDTH	EMITTER SCHEDULE
CALANDRINA SPECTABILIS	1 GAL	7	15"X3.5'	(1) 0.5 GPH
CHONDROPETALUM TECTORUM / SMALL CAPE RUSH	1 GAL	4	3'X4'	(2) 0.5 GPH
EUPHORBIA CHARACIAS SSP. WULF. 'SHORTY' / SPURGE	1 GAL	6	4'X4'	(1) 0.5 GPH
LANTANA X 'MONINE' / SPREADING SUNSHINE® LANTANA	1 GAL	5	2'X6.5'	
LAVANDULA X INTERMEDIA 'PROVENCE' / PROVENCE LAVENDER	1 GAL	22	2'X2'	(1) 0.5 GPH
LEUCADENDRON 'SYLVAN RED' / CONEBUSH	5 GAL	2	6'X6'	(3) 0.5 GPH
LEUCADENDRON 'WILSON'S WONDER' / SUNSHINE CONEBUSH	5 GAL	5	5'X7'	(3) 0.5 GPH
LOMANDRA HYSTRIX 'TROPICBELLE' / TROPIC BELLE MAT RUSH	1 GAL	9	3'X3.5'	(2) 0.5 GPH
MUHLENBERGIA RIGENS / DEER GRASS	1 GAL	12	4'X5'	(2) 0.5 GPH
RIBES SANGUINIUM / FUCHSIA-FLOWERING GOOSEBERRY	1 GAL	5	7'X4'	(2) 1.0 GPH
ROMNEYA COULTERI / COULTER'S MATILIJA POPPY	5 GAL	3	4'X7'	(3) 0.5 GPH
SALVIA MICROPHYLLA 'HOT LIPS' / HOT LIPS SAGE	1 GAL	9	3'X3'	(1) 0.5 GPH
STACHYS BYZANTINA 'HELEN VON STEIN' / LAMB'S EAR	1 GAL	20	10"X18"	(1) 0.5 GPH
STIPA ARUNDINACEA (SYN. ANEMANTHELE LESSONIANA) / NEW ZEALAND WIND GRASS	1 GAL	8	3'X3'	(1) 0.5 GPH

IRRIGATION NOTES

1. PRESSURE IS TO BE VERIFIED IN FIELD BY CONTRACTOR PRIOR TO BEGINNING WORK ON THE IRRIGATION SYSTEM. REPORT FINDINGS TO THE OWNER PRIOR TO BEGINNING WORK. FAILURE TO DO SO MAY RESULT IN ADDITIONAL WORK BY THE CONTRACTOR AT NO COST TO THE OWNER.
2. CONTRACTOR SHALL USE EXTREME CARE WHERE IT IS NECESSARY TO TRENCH NEAR EXISTING TREES. EXCAVATION IN AREAS EXHIBITING ROOTS 2" AND LARGER SHALL BE DONE BY HAND. ROOTS 1" OR LARGER IN DIAMETER DAMAGED IN CONSTRUCTION SHALL BE CLEANLY CUT AND NOT LEFT IN A RAGGED CONDITION. TREE ROOTS SHALL BE COVERED WITH WET BURLAP WHILE EXPOSED.
3. IRRIGATION COMPONENTS MAY BE SHOWN OUTSIDE PLANTER AREAS FOR GRAPHIC CLARITY. LOCATE EQUIPMENT IN NEAREST ADJACENT PLANTERS AS FEASIBLE AND INDICATE EXACT LOCATION ON RECORD DRAWINGS.
4. ALL PLANT MATERIAL TO BE IRRIGATED WITH POINT-SOURCE DRIP EMITTERS.
5. CONTRACTOR SHALL PROVIDE RIGID PVC CLASS 200 CONNECTION FROM VALVE TO 1/2" ABOVE GROUND TUBING. RIGID PVC AND 1/2" POLYETHYLENE PIPE CONNECTIONS SHALL HAVE ALL REQUIRED FITTINGS FOR TRANSITION FROM RIGID TO ABOVE-GROUND FLEXIBLE PIPE. ABOVE-GROUND 1/2" POLYETHYLENE TUBING SHALL HAVE A FLUSH CAP AT THE END OF ITS RUN AND BE STAKED WITH GALV. 12 GAUGE STEEL TIE-DOWN STAKES EVERY 4' O.C. 1/2" TUBING SHALL BE LAID HORIZONTAL TO SLOPE WHENEVER POSSIBLE WITH A MINIMUM OF CROSS-SLOPE SNAKING.
6. CONTRACTOR SHALL USE RAIN BIRD XERI-BUG EMITTERS (XB-10PC) PUNCHED INTO THE 1/2" POLY TUBING. INSTALL DIFFUSER CAP ON THE UPHILL SIDE OF PLANT STEM/TRUNK, AND STAKE DIRECTLY INTO ROOTBALL USING RAIN BIRD DBC-025 CAP FOR STAKE AND CAP COMBINED CONFIGURATION. THE DIFFUSER CAP SHALL BE SET HIGH ENOUGH SO THAT WATER CAN BE VISIBLY SEEN WHEN IN SYSTEM IS IN OPERATION.

IRRIGATION SCHEDULE

EQUIPMENT	MANUFACTURER/MODEL/DESCRIPTION
DRIP VALVES	DRIP VALVE KIT TO BE RAIN BIRD XCZ-075-PRF 3/4". INSTALLED BELOW GRADE IN AS FEW VALVE BOXES AS POSSIBLE. VALVE 1: SHRUBS IN PLANTER BETWEEN NEW FENCE AND NEW PATIO VALVE 2: NEW TREES VALVE 3: ALL OTHER PLANTINGS
POINT-SOURCE EMITTERS	RAIN BIRD XERI-BUG XB SINGLE OUTLET EMITTER SINGLE OUTLET PRESSURE COMPENSATING DRIP EMITTER, BARBED INLET WITH DBC-025 DIFFUSER CAP AT EACH EMITTER. DRIP EMITTER PER PLANTING PLAN SCHEDULE
BACKFLOW	WILKINS 975XL BACKFLOW DEVICE. INSTALL PER MANUFACTURER RECOMMENDATIONS AND PER CURRENT PLUMBING CODES
CONTROLLER	RAIN BIRD ESP4-SMTEI WITH (1) ESP-SM3 7 STATION INDOOR SMART MODULAR CONTROL SYSTEM. WALL MOUNTED ON INSIDE OF GARAGE WALL..
LATERAL LINES	3/4" PVC CLASS 200
MAIN LINE	PVC SCHEDULE 40

REVISIONS: | BY:

OWNER:
CHRISTOPHER & VIRGINIA WRIGHT
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010

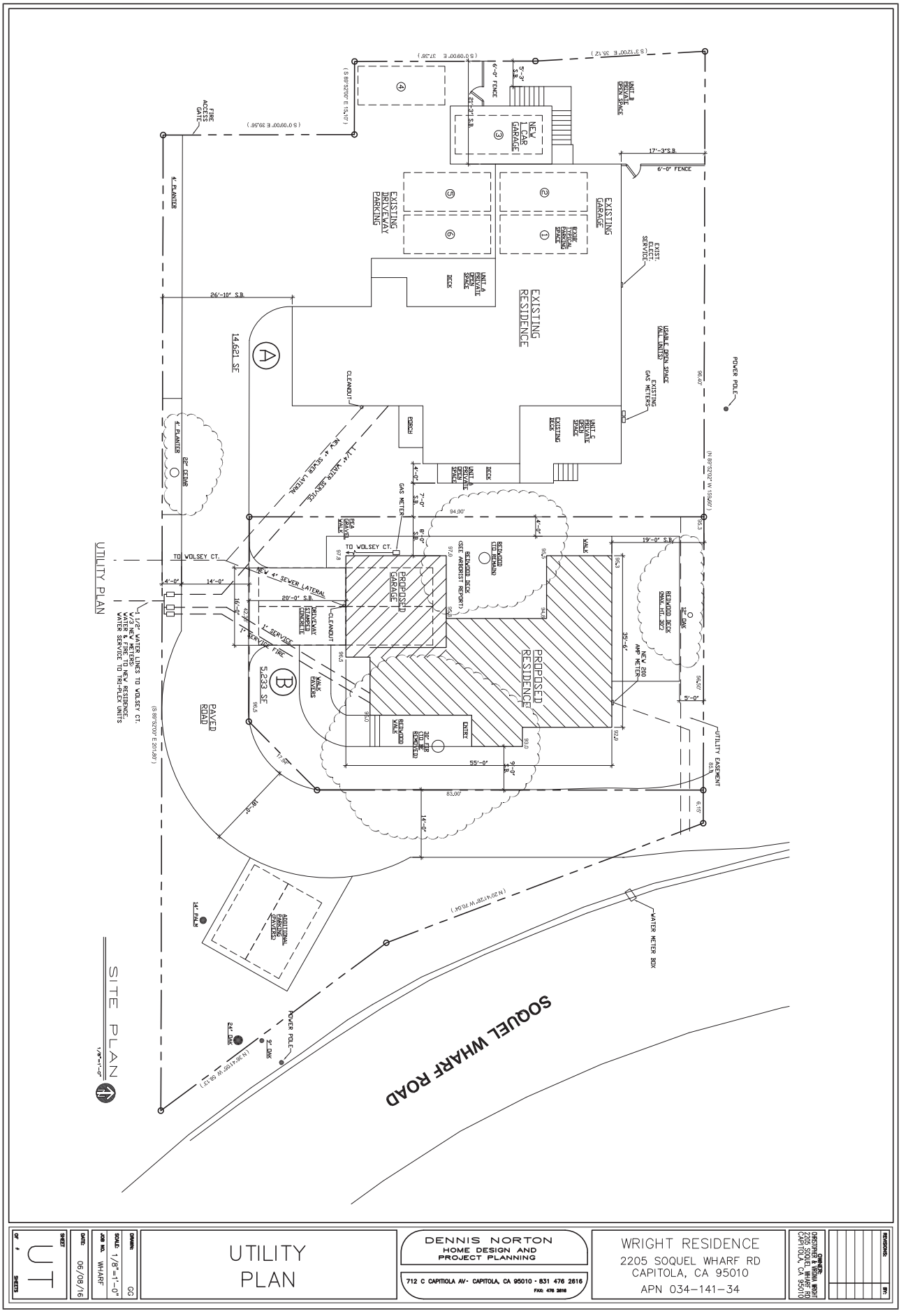
WRIGHT RESIDENCE
2205 SOQUEL WHARF RD
CAPITOLA, CA 95010
APN 034-141-34

LICENSED LANDSCAPE ARCHITECT
MEGAN BLENCOWE
NO. 5706
Exp. 4/11/18
STATE OF CALIFORNIA

mbLA
megan blencowe
landscape architecture
po box 328 aptos, ca 95001
(831) 818-6227
www.mb-landarch.com

LANDSCAPE PLAN

DRAWN: MB
SCALE: 1/8"=1'-0"
JOB NO. WHARF
DATE: 03/08/16
SHEET L-1
OF 1 SHEETS



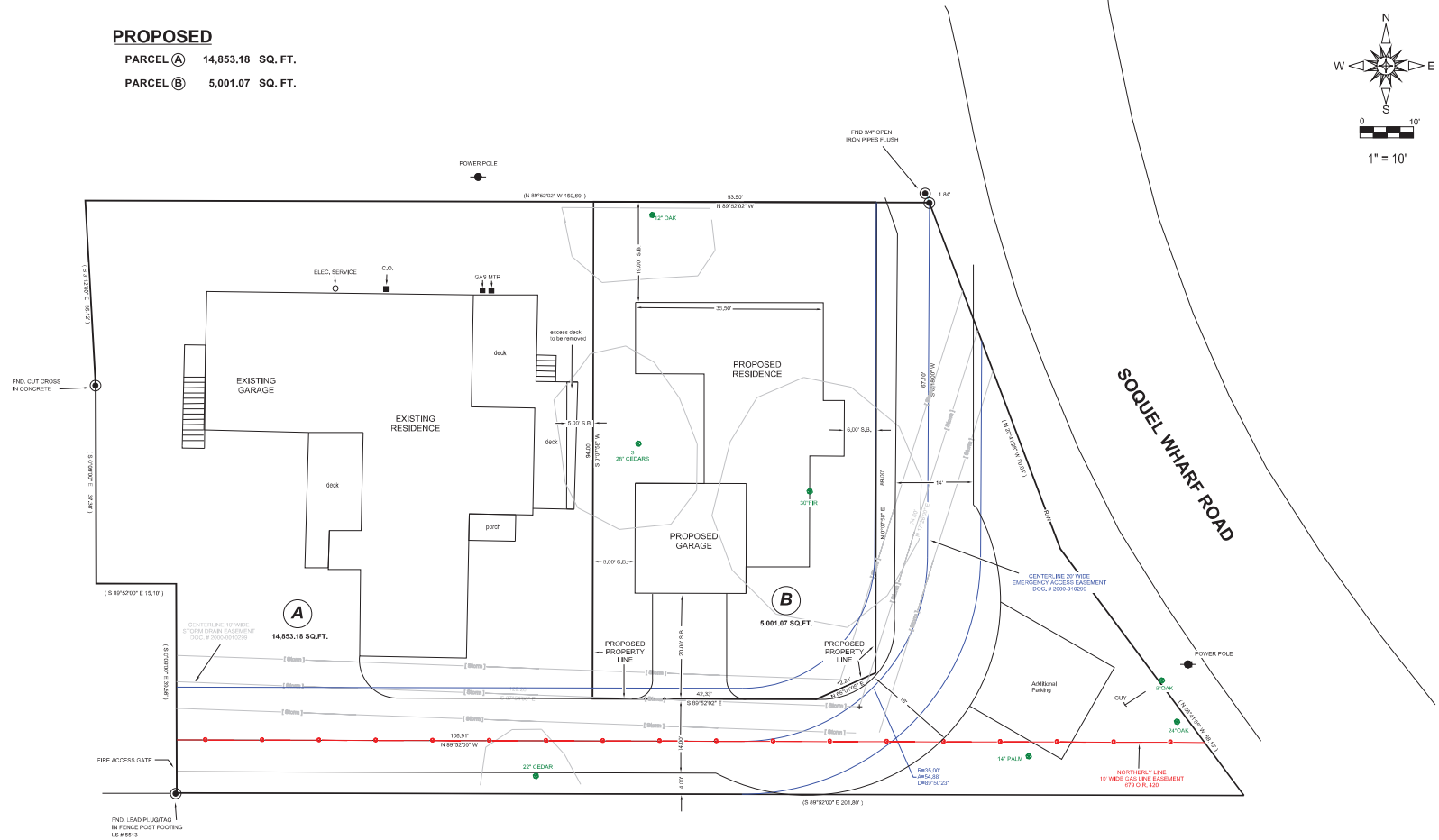
UTILITY PLAN	DENNIS NORTON HOME DESIGN AND PROJECT PLANNING 712 C CAPITOLA AV. CAPITOLA, CA 95010 · 831 476 2616 FAX: 476 2616	WRIGHT RESIDENCE 2205 SOQUEL WHARF RD CAPITOLA, CA 95010 APN 034-141-34	OWNER: DOROTHY WRIGHT 2205 SOQUEL WHARF RD CAPITOLA, CA 95010

SHEET UT OF SHEETS
DATE: 06/08/16
JOB NO. WHARF
SCALE: 1/8"=1'-0"
DRAWN: CC
REVISIONS: BY:

PROPOSED

PARCEL Ⓐ 14,853.18 SQ. FT.

PARCEL Ⓑ 5,001.07 SQ. FT.



TENTATIVE MAP
for a Minor Land Division
of the Lands of
CHRISTOPHER L. & VIRGINIA B. WRIGHT
2205 SOQUEL WHARF ROAD
Capitola, California 95010
A.P.N. 034-141-34

JAN 2016

RICK THOMPSON
PROFESSIONAL LAND SURVEYOR
BEN LOMOND, CALIFORNIA
831-336-3146

Traverse PC

Parcel Improvements at:
2205 Soquel Wharf Road
Capitola, CA 95010
APN: 034-141-34

Tree Resource Evaluation/ Construction Impact Assessment

Prepared For:
Christopher Wright
150 Greystone Court
Santa Cruz, CA 95062
March 1st, 2016

Kurt Fouts
Arborist Consultant
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Table of Contents

Attachments:

- Tree Assessment Chart
- Subject Tree Images
- Tree Inventory and Tree Protection Fencing Map
- Tree Protection Fencing Sign Example
- Assumptions and Limiting Conditions

ASSIGNMENT/SCOPE OF SERVICES

An application has been submitted for a minor land division and new two-story, single family residence, at 2205 Soquel Wharf Road (APN 034-141-34). There is an existing residence on the undivided parcel. The project is to be reviewed by the Capitola Planning Department. As an element of the application, this arborist report has been submitted, including a Tree Resource Evaluation. Potential construction impacts were assessed, as required by the City of Capitola Planning Department, Municipal Code, section 12.12.130 *Tree protection, management and maintenance.*

As a condition of approval of the building permit, I will review working drawings when they become available. After review, a supplemental arborist report will be submitted and construction impact mitigation treatments will be specified.

In order to complete this assignment, the following services were performed:

- **Plan Review:** Analyze provided plans including: Concept Site Plan by Dennis Norton Design and Tentative Map for a Minor Land Division by Rick Thompson, Land Surveyor
- **Tree Preservation Evaluation:** Inventory, evaluate and recommend tree retention or removal based on current tree condition and anticipated construction impacts.
- **Tree Preservation Specifications:** Create tree preservation specifications including a protection fencing plan.
- **Construction Impact Mitigation Specifications:** Provide specifications for remedial treatments, to reduce construction impacts to retained trees and ensure their long term survival.
- **Pruning Specifications:** Generate pruning specifications as necessary to facilitate construction activities, building clearance and improve tree structure.
- **Tree Canopy Evaluation and Tree Replacement Recommendations:** Access tree canopy coverage. Provide tree replacement specifications, if required.

BACKGROUND

On February 24th, I met with the parcel owner Christopher Wright on site. We reviewed the current plans for the proposed development and how they related to the existing trees.

In March, 2016, a site analysis was conducted. All trees within the property boundary were assessed for their health and structural condition.

Numbered tree tags were attached to each tree. The corresponding numbers and surveyed tree locations are documented on the attached *Tree Location Map*.

Construction impacts were evaluated using the Site Plan by Dennis Norton Design.
The following section summarizes my findings.

SUMMARY OF FINDINGS

On March 1st, 2016, I made a site visit to the proposed development at 2205 Soquel Wharf Road. The site topography slopes gently from west to east, then, at the driveway it slopes more abruptly, with a steep slope beyond the driveway edge and down to Wharf Road. Soils are clay loam and appear well drained.

I assessed eight trees which were located mostly at the perimeters of the property, with two significant trees a giant sequoia located on the west edge, and a deodar cedar located towards the center of the property. One tree, an incense cedar is located on the adjacent property.

The trees were generally in fair to good condition, ranging in age from young to mature. The native tree vegetation occurring naturally on the site appears to be limited to the coast live oaks, with the giant sequoia and incense cedar introduced.

The native trees (4), two coast live oaks, one incense cedar and one giant sequoia, were all in fair to good health, with fair to good structure.
The health of the remaining trees (4), including a deodar cedar, loquat, palm and apple was good. The structure of these four trees was fair to good.

I recommend retention of six trees and removal of two trees. Two trees are recommended for removal because of their very close proximity to a design feature. In this case, the deodar cedar is located close to the home foot print and the apple is very close to the sound wall foundation.

TREE EVALUATION METHODS

The evaluation included seven trees located within property boundaries of the proposed project. One tree, an incense cedar, was located outside the property of the proposed project but within range of construction impacts.

Evaluations and individual tree data is provided in the *Tree Assessment Chart, Appendix A* of this report. Health and structural conditions are rated. Potential construction impact ratings for each tree are described and graded. Additionally, each trees suitability for preservation is rated. Also provided are tree images depicting current tree conditions. **To correlate the data in the Tree Assessment Chart to the tree's location on the site, refer to the Tree Location and Tree Protection Fencing Plan. Tree locations are overlaid onto the Tentative Map site plan provided by Rick Thompson - Land Surveyor, dated January 2016.**

Following is an explanation of the data used in the tree evaluations and incorporated into the *Tree Assessment Chart, Appendix A:*

Tree #:

The trees have been assigned a number and are physically tagged as indicated on the site plan.

Common and Botanical Name (Species):

The botanical name and common name are designated for each tree.

Trunk Diameter and Number of Trunks:

Trunk diameter as measured at 4.5 feet above grade. The number of trunks refers to a single Or multiple trunk trees. Trunks must occur at or below 4.5 feet above grade for a tree to be Considered as having multiple trunks for purposes of measurement.

Height and Crown Diameters:

Approximate visual estimates. Accuracy is within plus or minus 10% it the indicated estimate.

Health and Structural Ratings:

Trees are rated based on relative conditions such as vigor, the extent of decay, structure, and insect or disease problems. Good and fair ratings indicate limited structural problems, acceptable vigor, and an absence of significant pest or disease problems. Poor ratings indicate serious health or structural problems. Trees rated as poor are often a high risk of structural failure.

The comments and observations describe the basis for the health and structural rating. The specific pests, disease and structural defects observed are described and identified, if possible.

This evaluation is of above ground structure and conditions only, additional defects may exist at the root collar. Often, larger mature and over mature trees require a root collar examination to evaluate the primary structural roots and root collar for decay and disease. In addition, an aerial inspection of the limb structure may be required.

Health Ratings:

Good: A healthy, vigorous tree, reasonably free of signs and symptoms of disease

Fair: Moderate vigor, moderate twig and small branch dieback, crown may be thinning and leaf color may be poor.

Poor: Tree in severe decline, dieback of scaffold branches and/or trunk, most of foliage from epicormics.

Structure Ratings:

Good: No significant structural defects. Growth habit and form typical of the species.

Fair: Moderate structural defects that might be mitigated with regular care.

Poor: Extensive structural defects that cannot be abated.

Comments/Observations:

This is the summary discussion of the health and structural ratings. Identification of any significant pest or disease or structural defect is incorporated in this section.

Suitability for Preservation Ratings

Rating factors:

Tree Health: Healthy vigorous trees are more tolerant of construction impacts such as root loss, grading and soil compaction, than are less vigorous specimens.

Structural integrity: Preserved trees should be structurally sound and absent of defects or have defects that can be effectively reduced, especially near structures or high use areas.

Tree Age: Over mature trees have a reduced ability to tolerate construction impacts, generate new tissue and adjust to an altered environment. Young to maturing specimens are better able to respond to change.

Species response: There is a wide variation in the tolerance of individual tree species to construction impacts.

Rating Scale:

Good: Trees in good health and structural condition with potential for longevity on the site

Fair: Trees in fair health and/or with structural defects that may be reduced with treatment procedures.

Poor: Trees in poor health and/or with poor structure that cannot be effectively abated with treatment. Trees can be expected to decline or fail regardless of construction impacts or management.

Construction Impacts Rating and Description:

Impacts are rated as high, moderate, low or none. Criteria for ratings are listed below. Descriptions include type of construction impact on roots, such as compaction or trenching. Impacts to canopy such as clearance pruning are also noted.

Rating Scale:

High: Development elements proposed that are located within the Tree Protection Zone that would severely impact the health and/or stability of the tree. These elements cannot be mitigated without design changes.

Moderate: Development elements proposed that are located within the Tree Protection Zone that will impact the health and/or stability of the tree and can be mitigated with tree protection treatments.

Low: Development elements proposed that are located within or near the Tree Protection Zone that will impact the health of the tree and can be mitigated with tree protection treatments.

None: Development elements will have no impact on the health and stability of the Tree.

Tree Protection Zone (TPZ) and Critical Root Zone (CRZ):

A tree protection zone designated as a radial distance from the trunk establishes the area where tree protection procedures are required. The critical root zone is the radial area around the trunk where all root impacts should be avoided or mitigated with specialized procedures. Impacts in this zone are likely to affect tree health permanently and could potentially destabilize the tree.

This is the protected area that allows the majority of the structural root zone, to be undisturbed while still facilitating necessary grading, the construction of buildings and associated construction related activities. Tree Protection Zones are delineated in the *Tree Location and Tree Protection Fencing Plan*, attached to this report.

EVALUATION OF CONSTRUCTION IMPACTS

The impacts to the tree resources resulting from the construction of the proposed residence have been assessed.

Two trees will require removal. The deodar cedar and the apple. The deodar cedar is recommended for removal because it is located in the entry way foot print, and is 5 feet from the proposed home foundation. Additionally, this tree cannot be effectively pruned to provide adequate clearance from the proposed two –story structure as a result of its close proximity and wide spreading canopy.

Since the apple tree is located within 3 feet of the proposed sound wall foundation, it should be removed.

Two trees on the property will be at least moderately impacted.

The giant sequoia tree (tree #2) is growing 7 feet from the edge of the proposed garage foundation, and 7, and 11 feet from two areas of the homes foundation. There are also patio pavers proposed between the tree trunk and the west side of the home. The impacts resulting from construction activities are moderate to high. The type of foundation construction and installation methods will determine the degree of impact.

Since the tree protection zone is estimated at 18 feet, it will be necessary to encroach into the Critical Root Zone (CRZ), in order to construct this home.

The excavation required to construct the driveway foundation may damage or remove structural roots responsible for keeping the tree upright, in addition, some absorbing roots responsible for supplying the tree with moisture and nutrients will be removed and the area for root re-growth will be reduced.

Additionally, root loss could occur in the construction of the homes foundation. The amount of root loss will be dependent on the type of foundation installed and the installation methods.

The second tree that will be at least moderately impacted from construction is the coast live oak (tree #2). This tree is located within 12 feet of the north end of the home. Impacts to this tree include soil compaction and loss of absorbing roots.

The remainder of the trees on the property (and one on the adjacent property, tree #1), will be minimally impacted or for some trees, there will be no construction impact.

CONSTRUCTION METHODS TO REDUCE TREE ROOT IMPACTS

In order to minimize soil compaction and root loss, I recommend post and beam foundation construction for the proposed residence. The foundation for the garage is recommended to be a reinforced concrete, 'floating' slab on grade. Additionally, a raised wood deck is recommend in place of patio pavers, under the canopy of the Giant Sequoia tree.

CONSTRUCTION IMPACT MITIGATION TREATMENTS

In order to assist in root exploration and reduce the impacts of this project on tree #2 giant sequoia and tree #4 coast live oak , the following procedures shall be completed:

- All ground cover (ivy and periwinkle) under the trees dripline shall be removed, by hand. Any ivy growing up the trunks of the trees should also be removed.
- Root exploration procedures in the proposed driveway foot print shall be implemented. The exploration areas are documented on the attached site plan.

Root Exploration Procedures:

A) Excavation to a depth equal to the proposed subgrade shall begin near the center of the garage foot print.
B) Equipment will be placed outside the Tree Protection Zone and will dig carefully toward the trunk of the tree in small increments.
C) Any roots encountered will be inspected and properly pruned as described below in section 5.4 'Root Pruning'.
D) This procedure will continue until the excavation has reached to one foot beyond the proposed edge of the foundation.
E) Pruned roots shall be treated as described below in section 5.4 'Root Pruning.'

- A supplemental arborist report, outlining specific impact mitigation treatments, will be submitted, after generation of working drawings.

TREE PRESERVATION AND PROTECTION PROCEDURES (General)

Construction of the new homes foundation and subgrade preparation for the new garage slab foundation will be the primary construction impacts for this project. The following guidelines are recommended to maximize tree performance and longevity. Not all of these recommendations will apply to this project.

1.0 Tree Protection Zone

1.1 All construction activity (grading, filling, paving, landscaping) will respect a Tree ProtectionZone (TPZ) around trees to be protected. The TPZ will be a distance of one-foot radial distance from the trunk for each one-inch of trunk diameter. Exceptions to this standard may occur depending upon the age and condition of individual trees.

2.0 Construction Observations and Supervision

2.1. All arboricultural and related soil work should be performed under the observation of an International Society of Arboriculture (ISA) Certified Arborist or City designated representative.

2.2. All specified arboricultural work should be completed prior to site grading (root pruning, canopy pruning, fencing, etc.)

2.3. The contractor is required to meet with the Project Arborist or City designated representative to review all the tree protection requirements

3.0 Tree Protection Fencing

3.1 Fencing at a minimum of four feet in height and clearly marked to prevent inadvertent encroachment by heavy machinery should be installed either at the edge of the Tree Protection Zone (TPZ), the crown drip line (whichever is further from the trunk), or at the edge of the construction zone, if the construction zone protrudes into the TPZ. The Project Arborist, or City designated representative, should approve the location of the fencing. All fencing should be in place prior to any site grading.

3.2. Contractor should maintain the protection fencing and prohibit all access to fenced areas by construction personnel or equipment until all site work is completed.

3.3. All structures including construction trailers, equipment storage areas, and any other construction traffic are prohibited within fenced areas. Burning or debris piles are prohibited within fenced areas. No materials, equipment, spoil, waste, or washout water should be deposited or stored within fenced areas. Fences may not be moved without

written permission of the Supervising Arborist or City designated representative.

3.4 If temporary access within a fenced area is determined to be necessary then a six-inch layer of bark mulch should be placed in all areas requiring access. This requirement for mulching should apply to all areas within the fenced area and subject to access. If equipment access is required, then the mulch should be overlaid with metal plates of sufficient thickness to adequately distribute bearing load.

3.5 Trunk protection planks shall be installed consisting of 2x4 wood planks placed over a closed–cell foam pad with straps binding the planks in place. This requirement shall apply to all trees where grading or construction activities occur within the TPZ. Trunk and scaffold barriers, protect trees from mechanical damage.

4.0 Demolition/Site Clearing

4.1 A qualified arborist should review any tree removal work within 50 feet of a TPZ. Trees requiring removal should be felled away from protected trees. Roots of trees to be removed may require pruning with approved root cutting equipment prior to felling if intermingled with roots of retained trees.

4.2 Excavation equipment should operate from outside the TPZ. Brush and wood chips generated from tree and brush removal should be placed in the TPZ to a maximum depth of six inches.

4.3 All required pruning should conform to the pruning section of these guidelines.
4.4 All brush removal should be performed with hand equipment when within a TPZ.

5.0 Site Grading, Trenching, and Root Pruning

5.1 Keep site grading within designated construction zones. Grading cuts or trenching within the TPZ of a retained tree trunk requires special trenching procedures. Trenches should be dug manually with an air spade or with the use of a root cutting machine, rock cutter, or other approved root-pruning equipment. This root-pruning trench should be placed one foot inside the edge of the grading cut or trench edge. The depth of the trench should equal the depth of the grading cut to a maximum depth of 40 inches.

5.2 A trench may be mechanically dug toward a tree until the edge of the TPZ is reached. From the edge of the TPZ, the special trenching procedures should apply.

5.3 Underground utilities, drain, and irrigation lines should be routed outside the TPZs. When lines must cross the TPZ, the lines should be bored or tunneled through the area at a depth approved by the supervising arborist. In these instances, a single shared utility conduit should be used to reduce impacts to trees.

5.4. Any roots one inch in diameter or larger requiring removal should be cut cleanly in sound tissue. The roots and surrounding soil should be moistened, and covered with a thick mulch (4") to prevent desiccation. No pruning seals or paints should be used on wounds. Cut and exposed roots should be protected from drying. A water absorbent material (i.e. burlap) should be secured at the top of the trench and should be draped over the exposed roots. This material should be kept moistened, and soil replaced as soon as practicable.

5.5 Use of retaining walls is recommended to protect retained trees rather than mass grading.

5.6. Fill placement areas covering 30% or more of the TPZ of trees larger than 24 inches dbh and over one foot in depth should be mitigated with a retaining wall or well. Installation of aeration systems may also be required depending upon the extent, depth, and type of the fill.

5.7 The established method for protecting trees subjected to deep grading fills is to construct a well around the trunk and install an aeration system over the root system at the original grade level. The aeration system utilizes perforated plastic pipe laid out in a radially spoked pattern from the tree well with vertical pipes providing connection to surface oxygen and water. This aeration system should facilitate drainage away from the trunk. The fill is then placed over the aeration system.

5.6 Porous pavements are recommended for use within the TPZ. Construction of the pavement sub-base should avoid grading cuts where possible.

6.0 Foundation and Wall Construction

6.1. Foundation construction within the TPZ of retained trees is recommended to be either a pier and grade beam construction that bridges root areas, cantilevered structures, or raised foundations using pier footings.

6.2 Wall construction within a TPZ should be a design that requires minimal excavation within the TPZ. Walls requiring over-excavation for tieback structures should not be used within a TPZ.

7.0 Site Drainage

7.1 All grading shall be designed to provide positive drainage away from the base of the tree trunk, and not create ponding within the TPZ.

7.2 Drainage features such as v-ditches and French drains will be utilized upslope from existing trees to divert runoff away from roots and the TPZ. These v-ditches are best utilized downslope of any irrigated landscape areas.

8.0 Pruning and Cabling

8.1 Any tree pruning, cabling, or other similar activity that may be proposed as part of site construction will be included on site plans and be reviewed by a qualified arborist or City designated representative.

8.2 Pruning methods shall conform to the ANSI A 300-2001 Pruning Standard Practices and performed by an ISA Certified Arborist or Certified Tree Worker. Cabling or other support systems shall conform to the ANSI A 300 (part 3)-2000 Standard Practices.

9.0 Tree Damage Mitigation

9.1 Trees damaged during construction shall be evaluated by the Supervising Arborist or City designated representative. Proper mitigation measures shall be specified and may include:

a.) Pruning of damaged and dead wood.
b.) Installation of a drip irrigation system to provide supplemental irrigation for three to five seasons following damage.
c.) Proper low nitrogen fertilization timed to growth response and phenological development of the tree.
d.) Periodic risk assessment of tree.
e.) Replacement of tree per City requirements.
f.) Alleviation of severe compaction by vertical mulching with augers or hydraulic soil probes.
g.) Alleviation of surface compaction by light cultivation or raking and the application of mulch.

10.0 Inspections

10.1 To ensure the successful implementation of the recommended procedures Site Inspections by the Project Arborist are recommended. Site inspections will take place at the following intervals throughout the course of the project:

- Following placement of grading stakes
- During preconstruction root exploration and root pruning
- After Tree Preservation fencing has been installed and prior to grading work
- As necessary during grading activities and construction
- If for any reason Tree Protection fencing needs to be temporarily relocated, the Project Arborist should be contacted.

11.0 Tree Health Care on Construction Projects

11.1 Project arborist to specify site-specific soil surface coverings (wood chip mulch or other) for prevention of soil compaction and loss of root aeration capacity.

11.2 Soil, water and drainage management is to follow the ISA BMP for "Managing Trees During Construction" and the ANSI Standard A300 (Part 2) - 2011 Soil Management (a. Modification, b. 'Fertilization, c. Drainage.)

11.3 Fertilizer / soil amendment product(s), amounts and method of application to be specified by Certified Arborist. Certain products may be recommended to provide optimum growing conditions, physiological invigoration, stamina, and recovery from construction impacts.

PRUNING SPECIFICATIONS

Tree #2, the giant sequoia will require pruning to attain building clearance and allow construction of the new home. Pruning should involve crown raising and crown reduction to achieve 5 feet clearance of all proposed structures. Only the minimum amount of canopy should be removed to produce these results.

Arial inspection and adjustment (if possible), of the existing cable work is recommended. Installation of new cable, utilizing 5/16 EHS grade, with ½ inch through rods should be considered. This cabling would be installed approximately 2/3 of the way up the trees canopy or approximately 40 feet above grade.

All pruning and cabling work shall be completed according to ANSI standards, as outlined above in sections 8.1 & 8.2, 'Pruning and Cabling.'

TREE CANOPY COVERAGE EVALUATION

Tree replacement for removed trees is a requirement of the City of Capitola Planning Department Municipal Code section 12.12.190. Replacement may or may not be required depending on the extent of tree canopy coverage for a given parcel. The tree canopy coverage for this property was evaluated using the County of Santa Cruz GISWEB aerial photo and property line overlay map. If the two trees recommended for removal are eliminated, the tree canopy coverage for this property appears to be slightly over 30%. The City of Capitola does not require tree replacement for removed trees if existing canopy coverage exceeds 30% on any given parcel. If it is determined by City of Capitola staff that the existing canopy coverage is less than 30%, the following trees are recommended to replace removed trees at the staff determined ratio.

RECOMMENDED REPLACEMENT TREES

Native trees, fifteen gallon size are recommended for this site.

Trees

Botanical Name	Common Name	Mature Size HT.X WD.	Evergreen/Deciduous
Quercus agrifolia	Coast Live Oak	20-70'X 25-80'	Evergreen
Calocedrus decurrens	Incense Cedar	75' X 25'	Evergreen
Torreya californica	California Nutmeg	15-20'X12-15'	Evergreen
Acer circinatum	Vine Maple	10-15' X 10'	Deciduous

Respectfully submitted,

Kurt Fouts ISA Certified Arborist WE0681A

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826 Monterey Avenue
Capitola, CA 95010
831-359-3607
scharborgrounds@yahoo.com

Wright Project - 2205 Soquel Wharf Rd. APN 034-141-34

Tree Assessment Chart - Appendix A

Suitability for Preservation Ratings:

Good: Trees in good health and structural condition with potential for longevity on the site

Fair: Trees in fair health and/or with structural defects that may be reduced with treatment proceedures

Poor: Trees in poor health and/or with poor structure that cannot be effectively abated with treatment

Retention or Removal Code:

RT: Retain Tree
RI: Remove Due to Construction Impacts
IM: Impacts Can Be Mitigated With Pre-Construction Treatments
RC: Removal Due to Condition

Tree #	Species	Trunk Diameter @ 4.5'	# of Trunks	Crown Height & Diameter	Health Rating	Structural Rating	Suitability for Preservation (Based Upon Condition)	Tree Protection Zone (in feet)	Construction Impacts (Rating & Description)	Retention or Removal Code	Comments
1	incense cedar (*Calocedrus decurrens*)	22"	1	50'X25'	Fair	Fair	Good	15'	Low/Compaction and root loss.	RT	Co-dominant stems beginning at 9' above grade. Tear out, loss of limb at 12' above grade. Optimal rooting area limited by existing asphalt driveway and neighbors concrete driveway. Result is below average vigor for species.
2	*giant sequoia (Sequoiadendron giganteum)*	32",52"	2	60'X35'	Good	Fair	Good	22"	Moderate to High/Compaction, root loss, canopy loss.	RT/IM	Codominant stems beginning at 9' above grade. Total of 3 primary stems. 3 to 5 degree lean to west, all 3 stems. Unbalanced canopy with 2/3 growth on west side. Two cables installed beteween 3 primary stems at 26' above grade. Tree topped at 50' above grade. Remove ivy growing on trunk and out to drip line.

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3/1/2016

Wright Project - 2205 Soquel Wharf Rd. APN 034-141-34

Tree Assessment Chart - Appendix A

Tree #	Species	Trunk Diameter @ 4.5'	# of Trunks	Crown Height & Diameter	Health Rating	Structural Rating	Suitability for Preservation (Based Upon Condition)	Tree Protection Zone (in feet)	Construction Impacts (Rating & Description)	Retention or Removal Code	Comments
3	deodar cedar (Cedrus deodara)	31"	2	65'X45'	Good	Good	Good	24'	High/ In entryway foot print and within 5 feet of proposed foundation.	RI	Excellent specimen. Well spaced scaffolds with good attachments.High quality pruning maintenance.
4	coast live oak (*Quercus agrifolia*)	12",11"	2	35'X40'	Good	Fair	Good	18'	Moderate/Compaction and root loss	RT, IM	Canker with minor bleeding in trunk at 4' above grade. Folige color is good.
5	apple	4",4"	2	25'X17'	Good	Fair	Fair	8'	High/ Within three feet of proposed sound wall.	RI	Asymetrical canopy due to suppression from cedar tree.
6	coast live oak (Quercus agrifolia)	14",16", 24",12", 24"	5	35'X35'	Fair	Fair	Good	27'	None/75' from proposed home foundation.	RT	Five stump sprouts from old failed tree. Tree was topped to clear high voltage lines. Existing concrete pad for additional parking, buffers roots, if pad is used for staging.

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Tree Assessment Chart - Appendix A

Tree #	Species	Trunk Diameter @ 4.5'	# of Trunks	Crown Height & Diameter	Health Rating	Structural Rating	Suitability for Preservation (Based Upon Condition)	Tree Protection Zone (in feet)	Construction Impacts (Rating & Description)	Retention or Removal Code	Comments
7	fan palm (*Washingtonia sp.*)	16"	1	25'X8'	Good	Fair	Good	8'	Low/ Protect trunk from exposure to construction equipment.	RT	Trunk has strong bow, self corrects to vertical. Prune adjacent oak for crown clearance. Remove dead fronds.
8	loquat (*Eriobotrya deflexa*)	5",4",4"	3	20'X18'	Fair	Good	Good	10'	Low/ Protect trunk from exposure to construction equipment.	RT	Suppressed growth due to adjacent oak. Canopy density is thin.

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Site and Tree Images:

Tree #1 – incense cedar, below average vigor due to limited rooting area

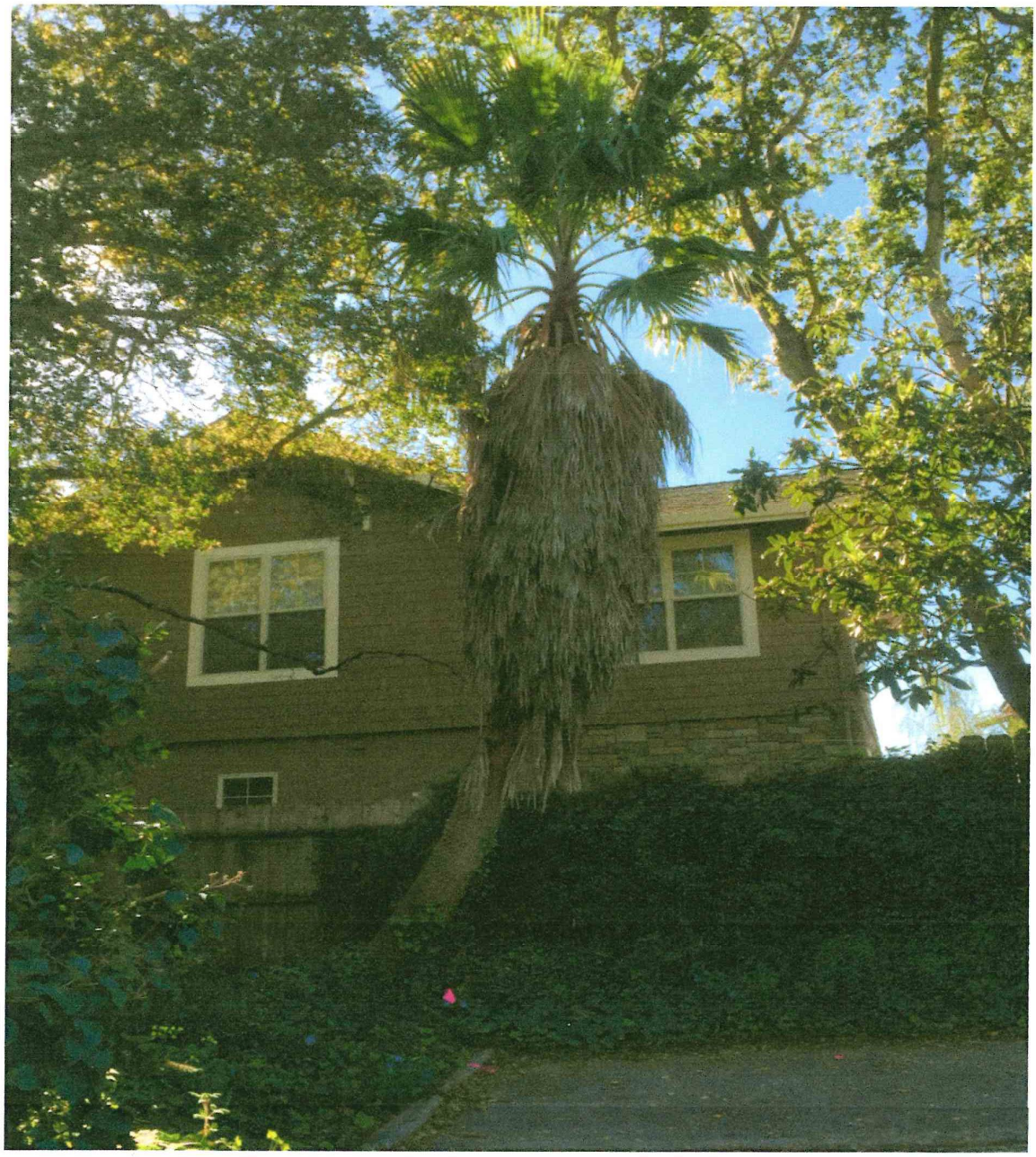
Tree #2 – giant sequoia, co –dominant trunks

Tree #3 - deodar cedar

Tree #4 – coast live oak, co – dominant trunks, good canopy density

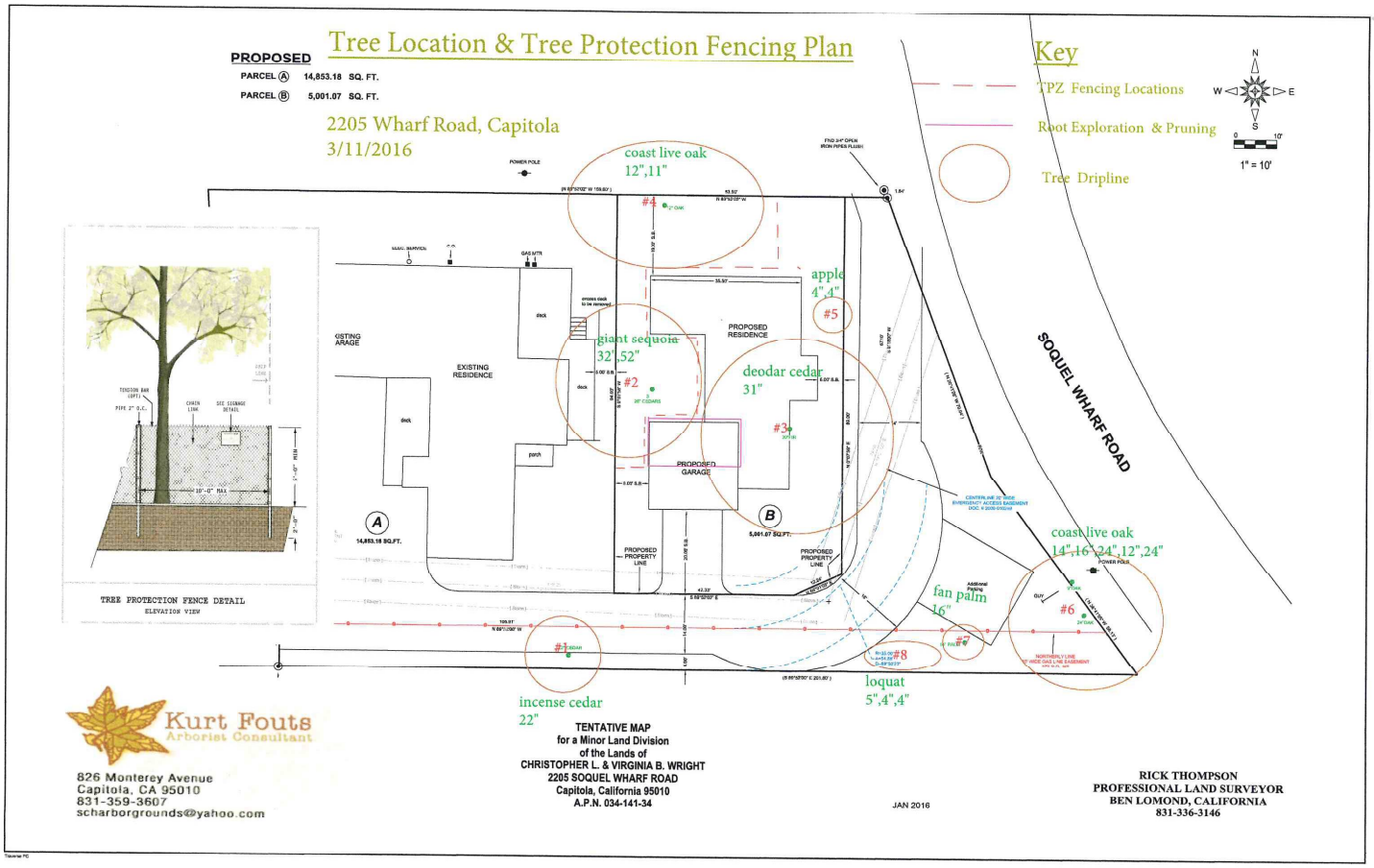
Tree #6 – coast live oak, new growth flush (light green color), needs ivy removed from trunks

Tree #5 - apple



Tree #7 – fan palm, note curved trunk, needs skirting of dead palm fronds

Tree #8 – loquat, nice shaped small tree, good siting for this species



Attachment: Arborist report 2205 Wharf Road (1419 : 2205 Wharf Road)

Warning

Tree Protection Zone

Keep Out

NOTICE: PROTECTIVE FENCING IS REQUIRED ON THIS JOB SITE.
REMOVAL OR DAMAGE OF THIS FENCING MAY RESULT IN A FINE

This sign must be prominently displayed. Fencing may not be moved or removed without permission of the Project Arborist.
During demolition and construction, all reasonable steps necessary to prevent damage, or the destruction of protected trees is required. Failure to comply with all precautions may result in a STOP WORK order being issue by the regulating agency.

No Entry without Project Arborist Authorization
Kurt Fouts –Arborist Consultant- 831 – 359 -3607

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided by the appraiser/consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as the quality of any title.
2. The appraiser/consultant can neither guarantee nor be responsible for accuracy of information provided by others.
3. The appraiser/consultant shall not be required to give testimony or to attend court by reason of this appraisal unless subsequent written arrangements are made, including payment of an additional fee for services.
4. Loss or removal of any part of this report invalidates the entire appraisal/evaluation.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person(s) to whom it is addressed without written consent of this appraiser/consultant.
6. This report and the values expressed herein represent the opinion of the appraiser/consultant, and the appraiser/consultant's fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.
7. Sketches. Diagrams. Graphs. Photos. Etc., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.
8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.
9. When applying any pesticide, fungicide, or herbicide, always follow label instructions.
10. No tree described in this report was climbed, unless otherwise stated. We cannot take responsibility for any defects which could only have been discovered by climbing. A full root collar inspection, consisting of excavating around the tree to uncover the root collar and major buttress roots, was not performed, unless otherwise stated. We cannot take responsibility for any root defects which could only have been discovered by such an inspection.

CONSULTING ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education. Knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce risk of living near trees, Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.